

Volume III

Plates and Plate Explanation

Plate I--Plate XXI.....Chapter II

Plate I-Plate XVIII.....Liulaobei, Shijia, Zhaowei and Jiayuan Formations

Plate XIX-Plate XXI.....Gouhou and Jingshanzhai Formations

Plate XXII--Plate XLI.....Chapter III

Plate XXII-Plate XXIV.....Mega-algal fossils

Plate XXV-Plate XXVII.....Nantuo, Duoshantuo and Dengying Formations

Plate XXVIII-Plate XL.....Qiongzhusi Formation

Plate XLI.....Tianzhushan Member and Shipai Formation

Plate XLII--Plate CIX.....Chapter IV

Plate XLII-Plate LVII.....Bitter Springs Formation

Plate LVIII-Plate CIII.....Pertatataka Formation

Plate CIV-Plate CIX.....Tempe Formation

Plate XV

- Figs.A-H. *Pyritosphaera barbaria* Love, 1957
A-B. Slide 82AL04-1, (7 x 104).
C. Slide 85A202-4, (19.8 x 100.5).
D. Slide 85A202-6, (13 x 102.5).
E. Slide 85A202-6, (16.7 x 106.6).
F. Slide 85A202-6, (15.5 x 111).
G. Slide 83A074-4, (19 x 112).
H. Slide 85A271-3, (18.5 x 114.8).
- Figs.I-J. *Alliumella baltica* Vanderflit, 1971
I. Slide 82AL11-9, (7.8 x 115).
J. Slide 83A204-1, (15.3 x 114.8).
- Fig.K. *Leiosphaeridia asperata* (Naumova) Lindgren, 1982
Slide 82AL11-5, (19.5 x 116).
- Fig.L. *Micrhystridium oligum* Jankauskas, 1976
Slide 83A078-1, (15.5 x 100.7).
- Figs.M-P. cf. *Melanocyrrillium* sp.
M. Slide 82AL05-7, (8.4 x 111.8).
N. Slide 82AL02-4, (4.5 x 103.6).
O. Slide 85A253-15, (19.5 x 99.6).
P. Slide 82AL08-7, (6.7 x 101.6).
- Fig.Q. Enigmatic specimen. Note specimen with an opening, slide
83A078-3, (18.2 x 99.2).
- Figs.R-T. Form-I (Chitinozoan-like microfossils)
R. Slide 82AL24-1, (19 x 102.7).
S. Slide 82AL04-5, (21.4 x 116.8).
T. Slide 82AL29-1, (17.5 x 99.7).
- Figs.U-V. cf. *Eosphanocapsa* sp.
Two focus levels, slide 82AL11-6, (1.8 x 115.6).

The specimens from the Huaibei Group in the Huaibei region including Fig.G from the Jiayuan Formation, Zhaowei section; Fig.L, Q from the Zhaowei Formation, Zhaowei section; Fig.H from the Shijia Formation, Shijia section; Fig.O from the Gouhou Formation, Gouhou section; and others from the Liulaobei Formation, Huainan Group in the Huainan region.

The scale bar below Fig.K is 26 μ m for I, L, P-T; 40 μ m for A-D, G-H, J, M-O and 63 μ m for E-F, K, U-V.

Plate XV

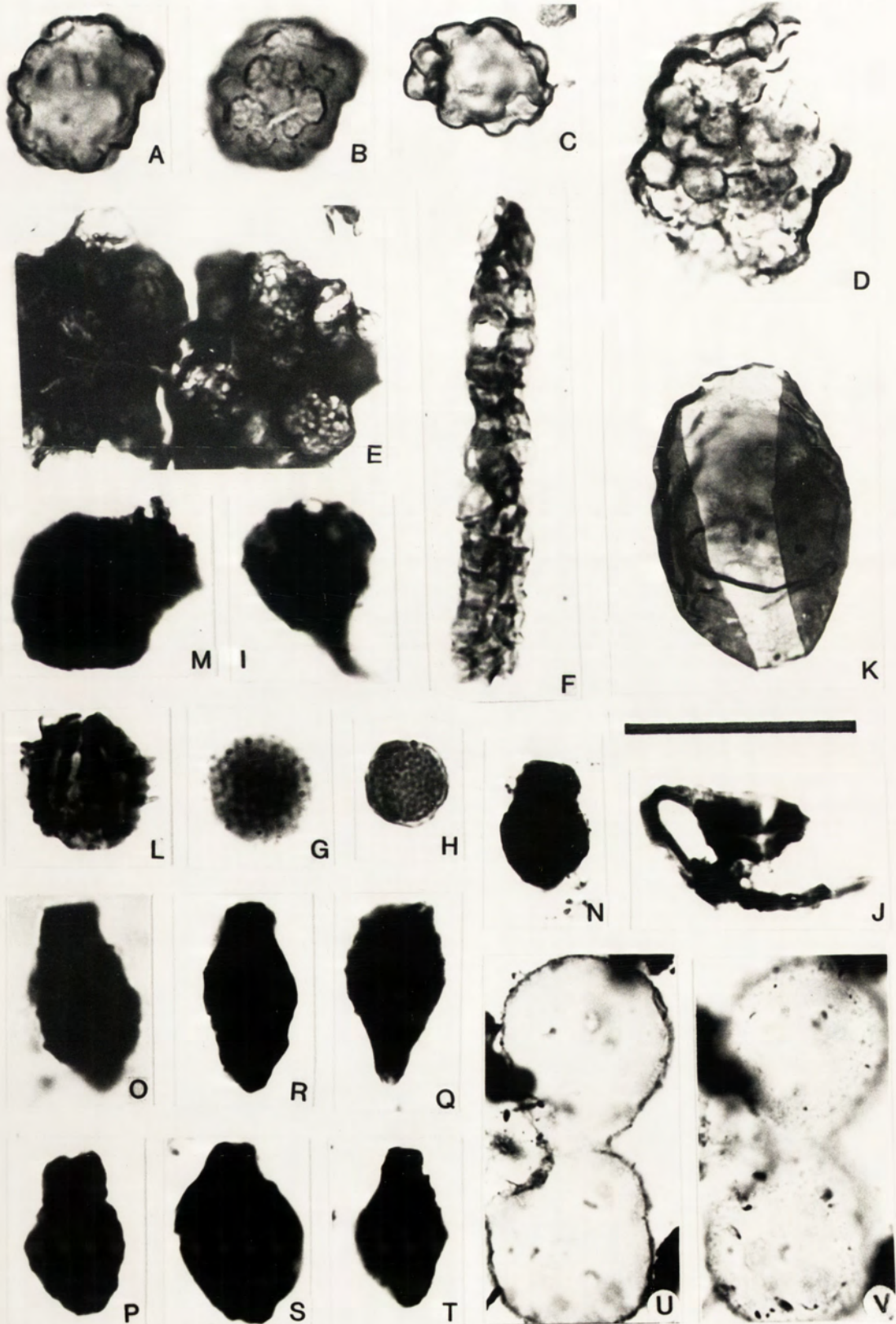


Plate XVI

Showing the diversity of the chitinozoan-like microfossils.

Figs.A-B, D. Form-II

A-B. Two focus levels. Note long neck structure, B. shows an operculum-like structure. Slide 82AL11-7, (12 x 102.2).

D. Slide 83A83-1, (5.9 x 110.8).

Fig.C. Note double-walls and porous surface. Slide 85A202.

Fig.E. Form-III. Slide 82AL11-9, (12.8 x 110.8).

Figs.F-G. Form-IV.

F. Slide 83A083-1, (9.3 x 109).

G. Slide 83A083-1, (13.3 x 108.7).

Fig.H. Form-V.
Slide 82AL05-3, (19.6 x 110).

Fig.I. Form-VI.
Slide 82AL05-1, (14.8 x 112).

Fig.J. Form-VII.
Slide 85A202-6, (8.5 x 115.3).

Fig.K. Form-VIII.
Slide 83A204-7, (3 x 105).

Specimens Figs.D, F, G collected from the Zhaowei Formation, Zhaowei section, Tongshan County in the Huaibei region; and others from the Liulaobei Formation, Huainan Group in the Huainan region.

The scale bar below Fig.E is 13 μ m for D, F, I; 20 μ m for A-C, E, G-H and 40 μ m for J-K.

Plate XVI

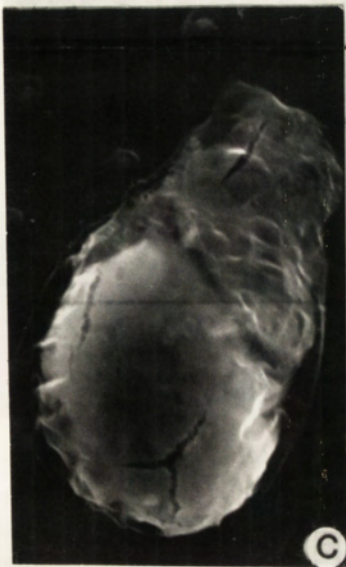
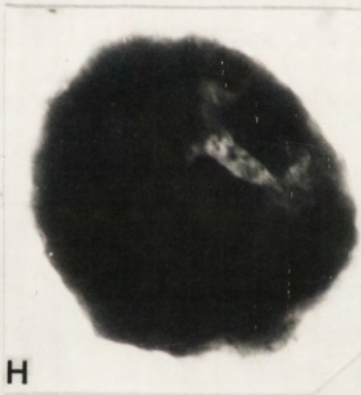


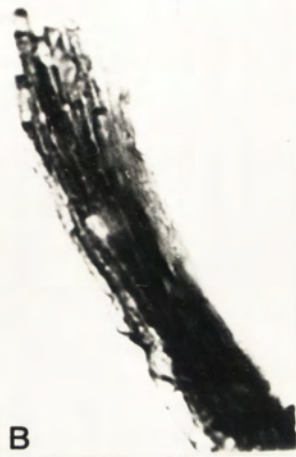
Plate XVII

- Figs.A-E. *Eomycetopsis parallela* sp. nov.
A. Holotype, note parallel arrangement of filaments and semicircular apical structure, slide 85A202-1, (3.5 x 105).
B. Paratype, slide 85A202-3, (13.6 x 111.5).
C. Slide 85A202-6, (15 x 114.8).
D. Slide 85A202-1, (6.1 x 102.7).
E. Slide 85A229-1, (10.7 x 101).
- Figs.G-I. *Eomycetopsis robusta* (Schopf) Knoll et Golubic, 1979
G. Slide 85A229-1, (18.5 x 97.4).
H. Slide 85A229-1, (10.8 x 114.5).
I. Slide 85A202-5, (13.3 x 120.5).
- Fig.J. *Eomycetopsis spiralata* sp. nov.
Holotype, note spiral structure, slide 83A083-2, (6.7 x 109.3).
- Fig.F, K-N. *Archaeotrichion contortum* Schopf, 1968
F. Slide 85A271-2, (9.1 x 108.4).
K. Slide 85A229-3, (8 x 97.5).
L. Slide 85A202-5, (10.5 x 106).
M. Note the very thin filaments are associated with the filaments *Eomycetopsis robusta*, slide 85A202-1, (6.2 x 112.8).
N. Slide 85A271, (18 x 105.2).

The specimens from the Huaibei Group in the Huaibei region including Fig.J from the Zhaowei Formation, Zhaowei section; Figs.F, N from the Shijia Formation, Shijia section; and others from the Liulaobei Formation, Huainan Group in the Huainan region.

The scale bar below Fig.D is 13 μ m for J; 20 μ m for C, M; 31 μ m for A-B, D, G-I, K-L and 40 μ m for E-F, N.

Plate XVII



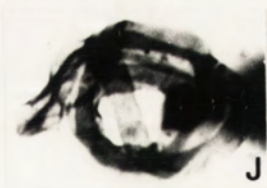
E

C

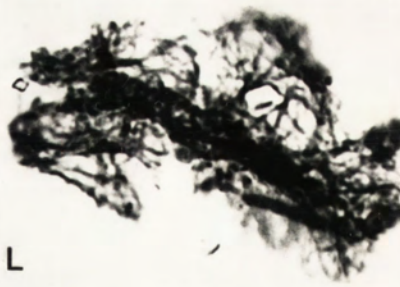
K



G



F



L



M



I

Plate XVIII

- Figs.A-C. *Palaeolyngbya barghoorniana* Schopf, 1968
A-B. Two focus levels, note thin sheath structure, upper-left filament is *Siphonophycus* sp., slide 85A202-2, (4.8 x 116.8).
C. Slide 85A202-6, (4.5 x 100.5).
- Figs.D-E, J, N. *Siphonophycus* sp.
D. Slide 85A229-3, (9 x 102.6).
E. Slide 85A229-4, (17 x 97.5).
J. Slide 85A202-8, (10 x 110).
N. Slide 85A229-2, (15.5 x 108.5).
- Fig.F. *Heliconema* ? sp.
Slide 82AL11-1, (18.5 x 109.5).
- Fig.G. *Archaeotrichion contortum* Schopf, 1968
Slide 85A202-1, (15 x 110.5).
- Fig.H. *Eomycetopsis spiralata* sp. nov. Note fine-granular texture on the spiral filament. Slide 85A202-2 (8.1 x 119.2).
- Fig.I, K-L. Diversity of *Oscillatorioopsis* sp.
I. Slide 83A204-9, (13 x 108.8).
K. Slide 82AL11-5, (18.2 x 116).
L. Slide 82AL11-5, (6.3 x 117.5).
- Fig.M. Unnamed filament.
note parallel striations, slide 85A202-5, (7 x 103.5).

All specimens collected from the Liulaobei Formation, Huainan Group in the Huainan region.

The scale bar below Fig.B is 13 μ m for F; 20 μ m for C, H; 31 μ m for E, J, L, N; and 40 μ m for A-B, D, G, I, K, M.

Plate XVIII

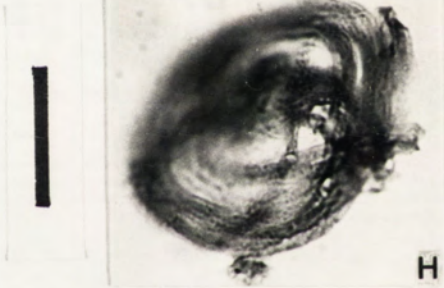


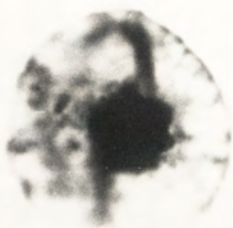
Plate XIX

- Fig.A. *Archaeodiscina umbonulata* Volkova, 1968
Slide 85A256-10, (8.5 x 103.5).
- Fig.B. *Volkovia flagellata* (Jankauskas) Downie, 1982
Slide 85A259-6, (7.2 x 108.5).
- Fig.C. *Leiomarginata* cf. *simplex* Naumova, 1960
Slide 85A256-11, (4.5 x 110).
- Fig.D. *Micrhystridium* sp.
Slide 85A256-5, (3.1 x 113).
- Figs.E-G. *Micrhystridium brevicornum* Jankauskas, 1976
E. Slide 85A256-11, (4 x 106.6).
F. Slide 85A256-6, (4.5 x 106.5).
G. Slide 85A256-5, (23.1 x 106.3).
- Figs.H-I, P, R. *Ovulum saccatum* Jankauskas, 1975
H. Slide 85A256-4, (8 x 108).
I. Slide 85A256-12, (16.5 x 113.8).
P. Slide 83A289-4, (8.5 x 106).
R. Slide 85A256-6, (12.5 x 105).
- Fig.J, L. *Leiofusa* sp.
J. Slide 85A256-15, (11.5 x 108.5).
L. Slide 85A256-6, (5.3 x 94.6).
- Fig.K. *Kildinosphaera* sp.
Slide 85A256-4, (7.8 x 113.8).
- Fig.M. cf. *Melanocyrrillium* sp.
Slide 85A256-11, (17 x 115).
- Fig.N. *Lophosphaeridium tuberosum* sp. nov.
paratype, slide 83A289-2, (20.3 x 97.8).
- Fig.O. Enigmatic specimen.
slide 85A256-11, (6.6 x 99).
- Fig.Q, T. *Pyritosphaera barbaria* Love, 1957
Q. Slide 85A256-5, (13.7 x 117).
T. Slide 85A256-8, (4.3 x 106.5).
- Fig.S. Enigmatic specimen with a 'median split'.
slide 85A256-11, (12.6 x 106).
- Figs.U-V. *Micrhystridium circulapertum* sp. nov.
Two focus levels, slide 85A256-2, (15 x 115.1).
- Fig.W. *Dictyotidium regulare* sp. nov.
Slide 83A288-2, (1.3 x 109.5).

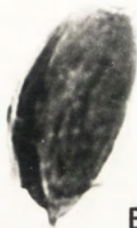
All specimens collected from the Gouhou Formation, Huaibei Group at the Gouhou section, Suxian in the Huaibei region.

The scale bar below Fig.F is 26 μ m for N, P; 40 μ m for A-E, G-I, Q-R, M, O, S-V; 50 μ m for L; 63 μ m for F, J; 80 μ m for K; and 100 μ m for W.

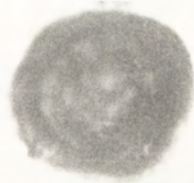
Plate XIX



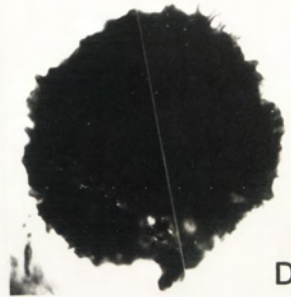
A



B



C



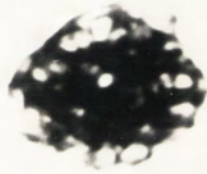
D



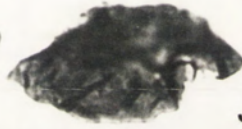
F



H



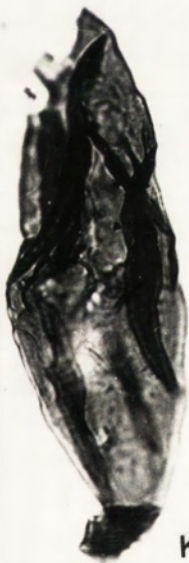
W



J



E



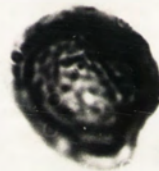
K



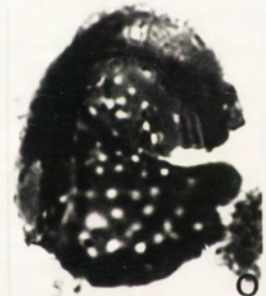
L



M



N



O



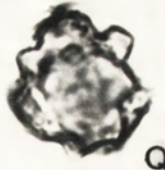
P



I



G



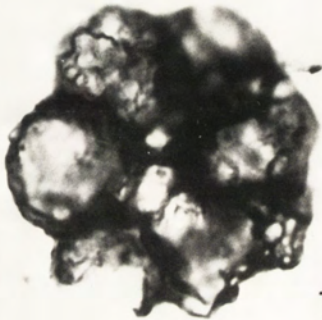
Q



R



S



T



U



V

Plate XX

- Figs.A-B, D. *Leiosphaeridia asperata* (Naumova) Lindgren, 1982
A. Slide 85A256-6, (10.5 x 119).
B. Slide 85A256-5, (14.6 x 119.1).
D. Slide 85A256-5, (20.8 x 102.5).
- Fig.C, F. *Kildinosphaera chagrinata* Vidal, 1983
C. Slide 85A256-14, (12 x 114.1).
F. Slide 85A256-14, (7 x 101.8).
- Fig.E, G. *Kildinosphaera granulata* Vidal, 1983
E. Slide 85A256-4, (9.5 x 117.5).
G. Slide 85A256-3, (20.5 x 110).
- Figs.H-I. *Kildinosphaera verrucata* Vidal, 1983
H. Slide 85A256-6, (13.8 x 120).
I. Slide 85A256-5, (7.5 x 107.2).
- Fig.J. *Trachysphaeridium cf.laminaritum* (Timofeev) Vidal, 1976
Slide 85A256-1, (11 x 114.5).
- Figs.K-L. cf. *Eoaphanocapsa* sp.
K. Slide 85A256-1, (11 x 106.5).
L. Slide 85A256-5, (16.7 x 95.7).
- Fig.M. *Stictosphaeridium* sp.
Slide 85A256-6, (5 x 96).

All specimens collected from the Gouhou Formation, Huaibei Group at the Gouhou section, Suxian County in the Huaibei region.

The scale bar below Fig.B is 40 μ m for B, D, F, H-I, K-M; and 63 μ m for A, C, E, G, J.

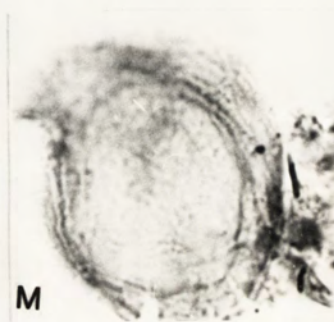
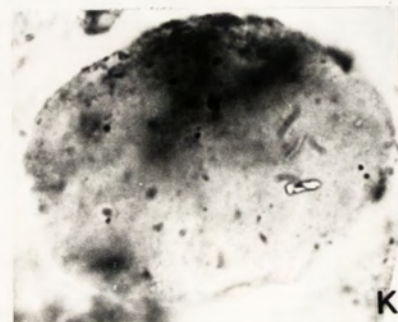
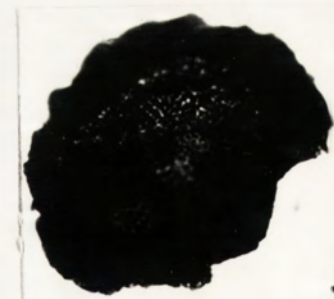
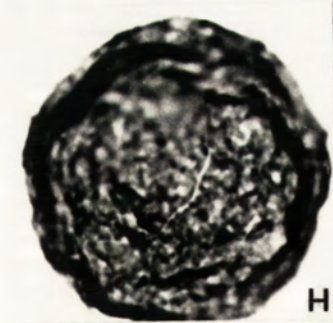
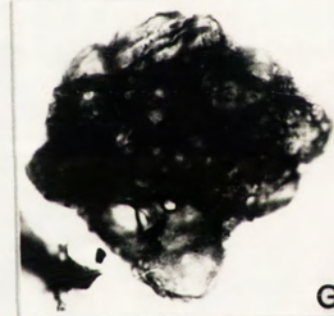
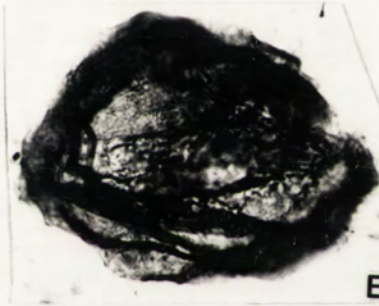
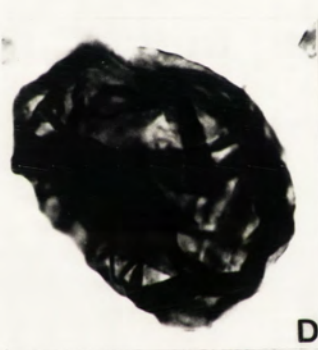
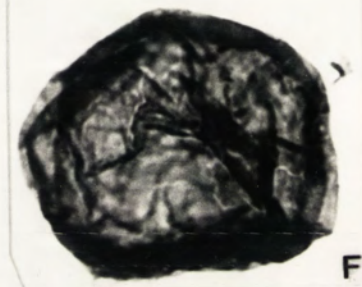
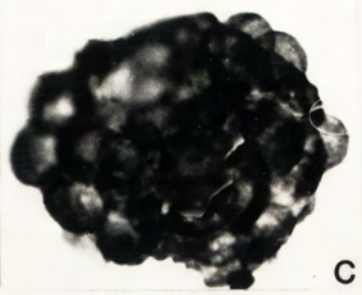
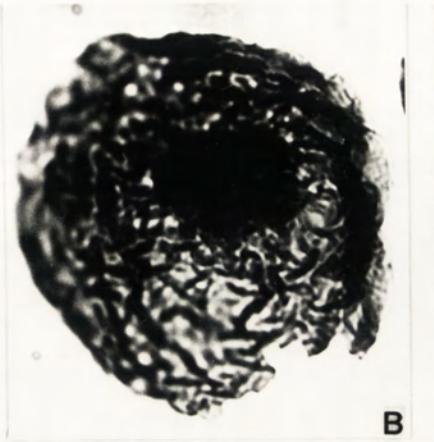


Plate XXI

- Figs.A-D. *Sinianella scabrata* sp. nov.
A. Holotype, slide 85A256-4, (2 x 110).
B. Slide 85A256-4, (10.2 x 96.8).
C. Slide 85A256-5, (15.1 x 124).
D. Slide 83A285-5, (9.5 x 117.5).
- Fig.E. *Sinianella uniplicata* (Yin, L. 1980) emend.
Slide 85A256-9, (5.5 x 108).
- Figs.F-G. *Protoleiosphaeridium laccatum* (Timofeev, 1966) comb.
F. Slide 83A288-11, (7 x 108.3).
G. Slide 85A256-4, (6 x 105.5).
- Figs.H-K. *Protoleiosphaeridium densum* (Timofeev) comb. correct.
H. Slide 85A256-1, (15.3 x 102.5).
I. Slide 85A256-4, (6 x 108).
J. Slide 85A256-12, (10.5 x 111).
K. Slide 85A256-12, (11.5 x 97.6).
- Fig.L. *Protoleiosphaeridium flexuosum* (Timofeev, 1966) comb.
Slide 85A253-2, (21.5 x 101).
- Fig.M. *Gloeodiniopsis* cf. *lamellosa* (Schopf, 1968) Knoll et
Golubic, 1979.
Slide 85A256-2, (11.8 x 110).
- Figs.N-Q. *Eomycetopsis robusta* (Schopf, 1968) Knoll et Golubic, 1979
N. Slide 83A289-4, (12.1 x 101.8).
O. Slide 85A256-2, (20.5 x 110.8).
P. Slide 85A256-6, (4.1 x 104.5).
Q. Slide 85A256-2, (21 x 103.5).

Specimen Fig.L collected from the Jingshanzhai Formation, and others from the Gouhou Formation. All specimens are from the Gouhou section, Suxian County in the Huaibei region.

The scale bar below Fig.A is 13 μ m for F; 20 μ m for B-D, G-M, O; 31 μ m for A, E, N, P; and 40 μ m for Q.

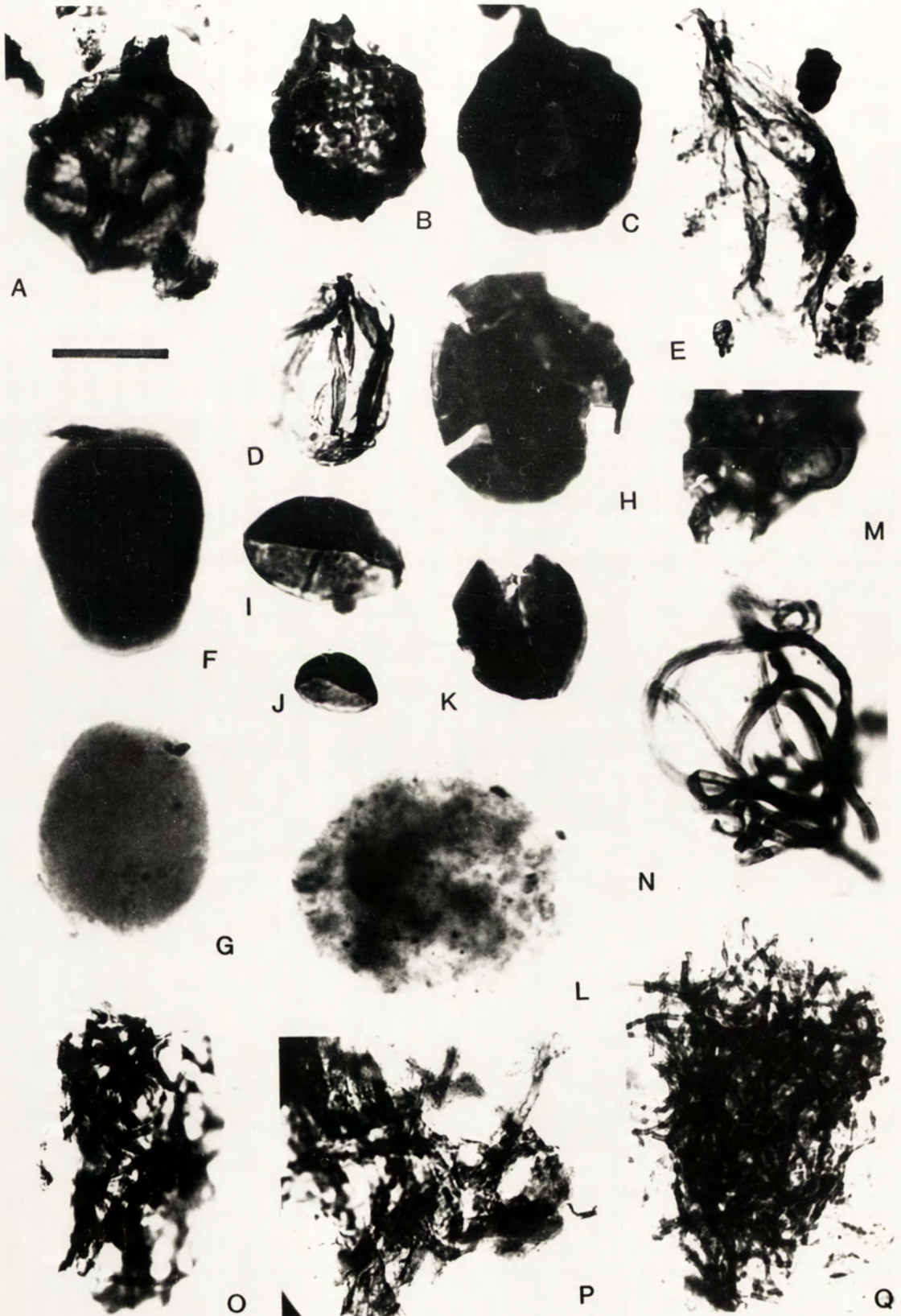


Plate XXII

- Figs.A-F. *Vendotaenia didymos* (Cao et Zhao) comb. nov.
A. Note dark ribbon thalli slightly tapering at one end and sharply constricted at the other. Sample No. Deng-1.
B-C. Displaying the ribbon thalli with different widths. Sample No. B. Deng-2; C. Deng-3.
D-F. Displaying the sinuous ribbon thalli. Sample No. D. Deng-4; E. Deng-5; F. Deng-6.
- Figs.G-H. *Tyrasotaenia* sp. (type-1).
G. Note the tapering terminals. Sample No. G. Chen-1; H. Chen-2.

Specimens A-F from the Shibantan Member, Dengying Formation at the Liantuo section in the Yangtze Gorges near Yichang City, Hubei; G-H from the Jiucheng Member, Yuhucun Formation at the Baimashan section near Chengjiang County, Yunnan.

The scale bar below Fig.G is 8mm for all specimens.

Plate XXII

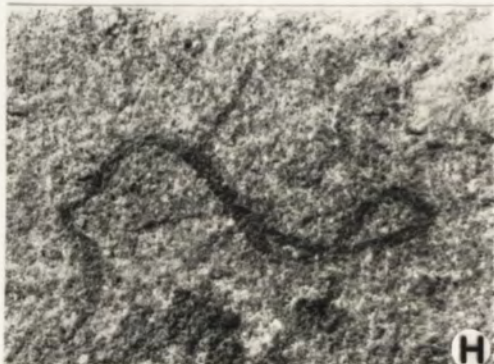
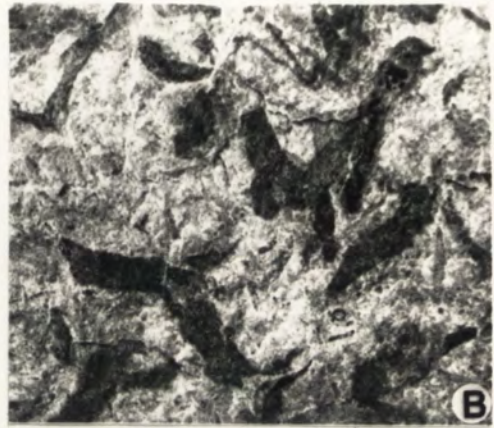
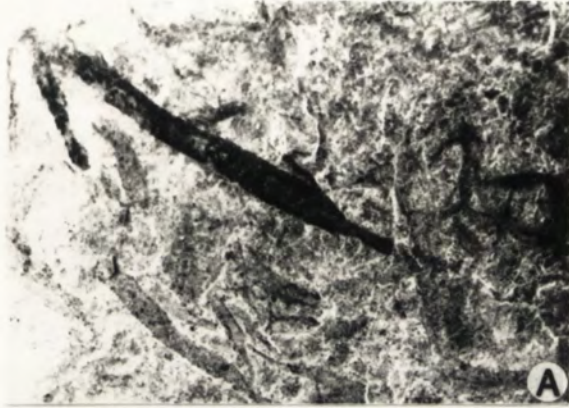


Plate XXIII

- Figs.A-B. *Vendotaenia* sp.
Note A displaying a spiral-like ribbon structure.
Sample No. A. Cam-1; B. Cam-2.
- Figs.C-D. *Tawuia dalensis* Hofmann, 1979
Sample No. C. Chen-3, D. Chen-4.
- Figs.E-F. *Tyrasotaenia* sp. (Type-1)
Note the thalli with one tapering terminal.
Sample No. E.Chen-5; F. Chen-6.
- Fig.G. *Longfengshania* ? sp.
Note the stem-like structure. Sample No. Chen-7.
- Figs.H-K. *Daltaenia* cf. *mackenziensis* Hofmann, 1985
Note H and K displaying lateral branching.
Sample No. H. Chen-8; J-K. Chen-9.

Specimens A-B from the Lower Cambrian Yu'an-shan Member, Qiongzhusi Formation at the Maotainshan section; C-G from the Upper Sinian Jiucheng Member, H-K from the Upper Sinian Baiyanshao Member, and both Members belonging to the Yuhucun Formation at the Baimashan section. Both sections are near Chengjiang County, Yunnan.

The scale bar below Fig.F is 8mm for all specimens.

Plate XXIII

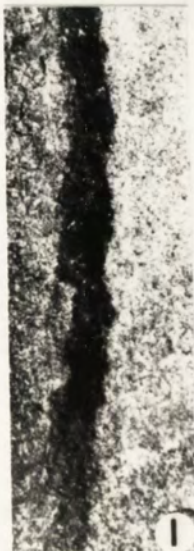
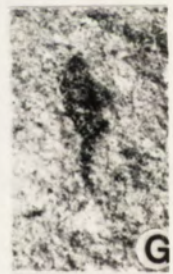
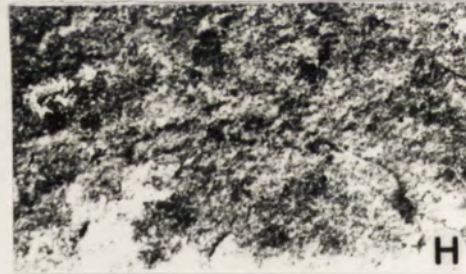
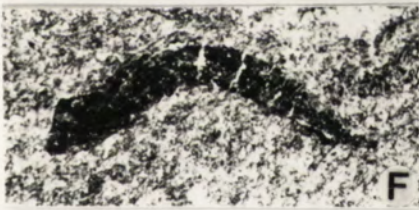
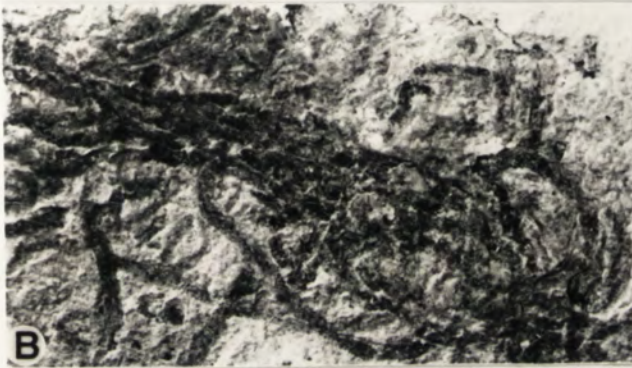
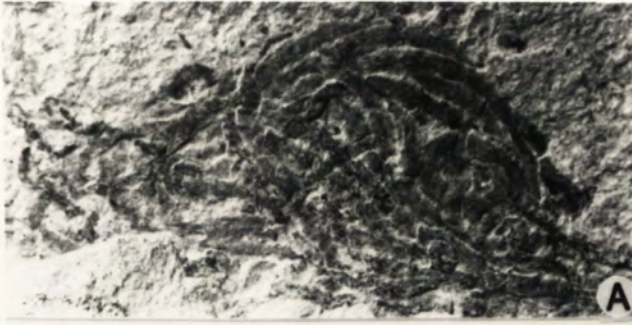


Plate XXIV

- Figs.A-B. *Daltaenia* sp.
Note the lateral branching. Sample No. A-B. Cam-3.
- Fig.C. *Vendotaenia* sp.
Sample No. Cam-4.
- Figs.D-F. *Tyrasotaenia* sp. (Type-2)
Note the ribbon thalli with stable width.
Sample No. D. Cam-5, E. Cam-6, F. Cam-7.
- Figs.G-H. *Sabellidites* sp.
Note worm body structures. Sample No. Cam-8.
- Fig.I. *Vendotaenia* sp.
Note the longitudinal stripes. Sample No. Cam-9.

All specimens from the the Lower Cambrian Yu'an-shan Member, Qiongzhusi Formation at the Maotianshan section near Chengjiang County, Yunnan.

The scale bar below Fig. H is 4mm for H, and 8mm for the others.

Plate XXIV

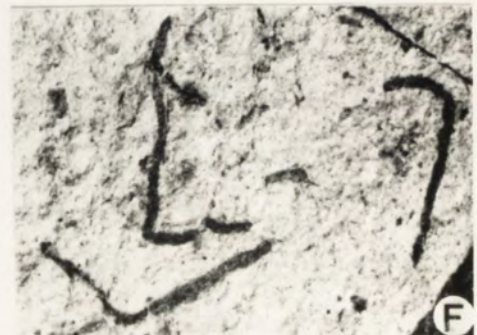
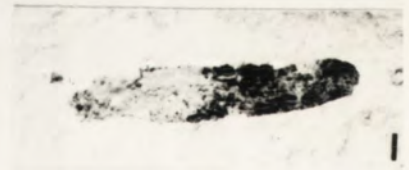


Plate XXV

- Fig.A. *Vandalosphaeridium varangeri* Vidal, 1981
Note short processes and outer membrane.
83H091-5, (5.5 x 104.3).
- Figs.B-F. *Favosphaeridium* sp.
B. 83H091-3, (21 x 111).
C-D. Two focus levels, 83H091-2, (307 x 104.8).
E-F. Two focus levels, 83H091-2, (15.8 x 104.5).
- Figs.G-J, L-N. *Dictyotidium* ? sp.
G-H. Two focus levels, 83H091-4, (17.8 x 108).
I. 83H091-2, (3.4 x 104.5).
J. 83H091-1, (10.4 x 110).
L-N. Three focus levels. 83H091-2, (10 x 107.8).
- Fig.K. *Stictosphaeridium* sp.
83H091-6, (8.5 x 112.4).
- Figs.O-P. *Sinianella* sp.
O. 83H094-2, (7 x 99).
P. 83H096-5, (10 x 10).

All specimens from the Lower Sinian Nantuo Tillite at the Wangfenggang section in the Yangtze Gorges near Yichang City, Hubei, central China.

The scale bar below Fig.F. is 32 μ m for A. E-F; 40 μ m for B-D, G-I, K-N, and 62 μ m for J. O-P.

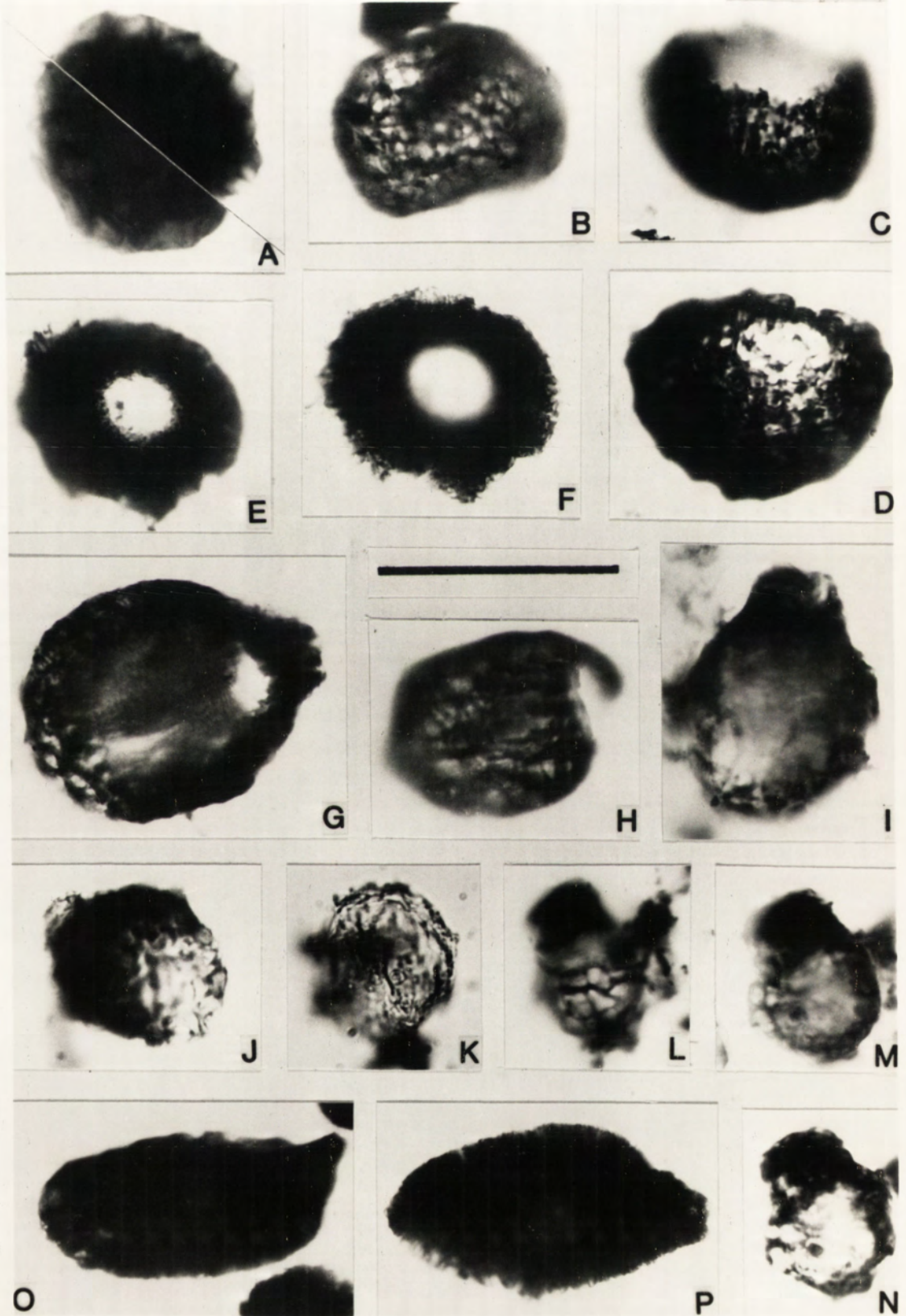


Plate XXVI

- Figs.A-E. *Trachysphaeridium cf. laufeldi* Vidal, 1976
A-B. Two focus levels, 85Y083-1, (15 x 99).
C-D. Two focus levels, 85Y083-1, (17.9 x 115.5).
E. 85Y083-2, (11 x 103.6).
- Figs.F-G. *Kildinosphaera granulata* Vidal, 1983
F. 83H096-3, (12.2 x 104.5).
G. 83H091-6, (10 x 96.5).
- Fig.H. *Trachysphaeridium laminaritum* (Tim) Vidal, 1976
83H091-6, (13.2 x 103).
- Figs.I-K. *Pyritosphaera barbaria* Love, 1957
Three focus levels, 83H091-3, (7 x 108.5).
- Figs.L-M. *Triangumorpha* sp.
Two focus levels, 83H177-2, (7.3 x 102.4).
- Fig.N. *Pyritosphaera barbaria* Love, 1957
83H180-2, (4.4 x 103).
- Figs.O-P, T-U. *Leiomarginata ? simplex* Naumova, 1960
O-P. Two focus levels, 85Y098-2, (13 x 100.8).
T-U. Two focus levels, 85Y098-1, (14.5 x 101).
- Fig.Q. *Navifusa crassa* (Sin et Liu, 1978) comb.
83H177-3, (11 x 94.5).
- Fig.R. *Kildinosphaera granulata* Vidal, 1983
83H177-3, (19 x 111).
- Fig.S. *Protoleiosphaeridium flexuosum* (Timofeev, 1966) comb.
83H180-2, (7.4 x 119).

The specimens A-E from the Nantuo Tillite, O-P, T-U from the Jiucheng Member, Dengying Formation, and both collected from Wangjiawan section, Jinning County, Yunnan; F-K from the Nantuo Tillite, L-N, Q-S from the Doushantuo Formation, and both from Wanfenggang section in Yangtze Gorges, Hubei.

The scale bar below Fig.M is 40 μ m for all specimens.

Plate XXVI

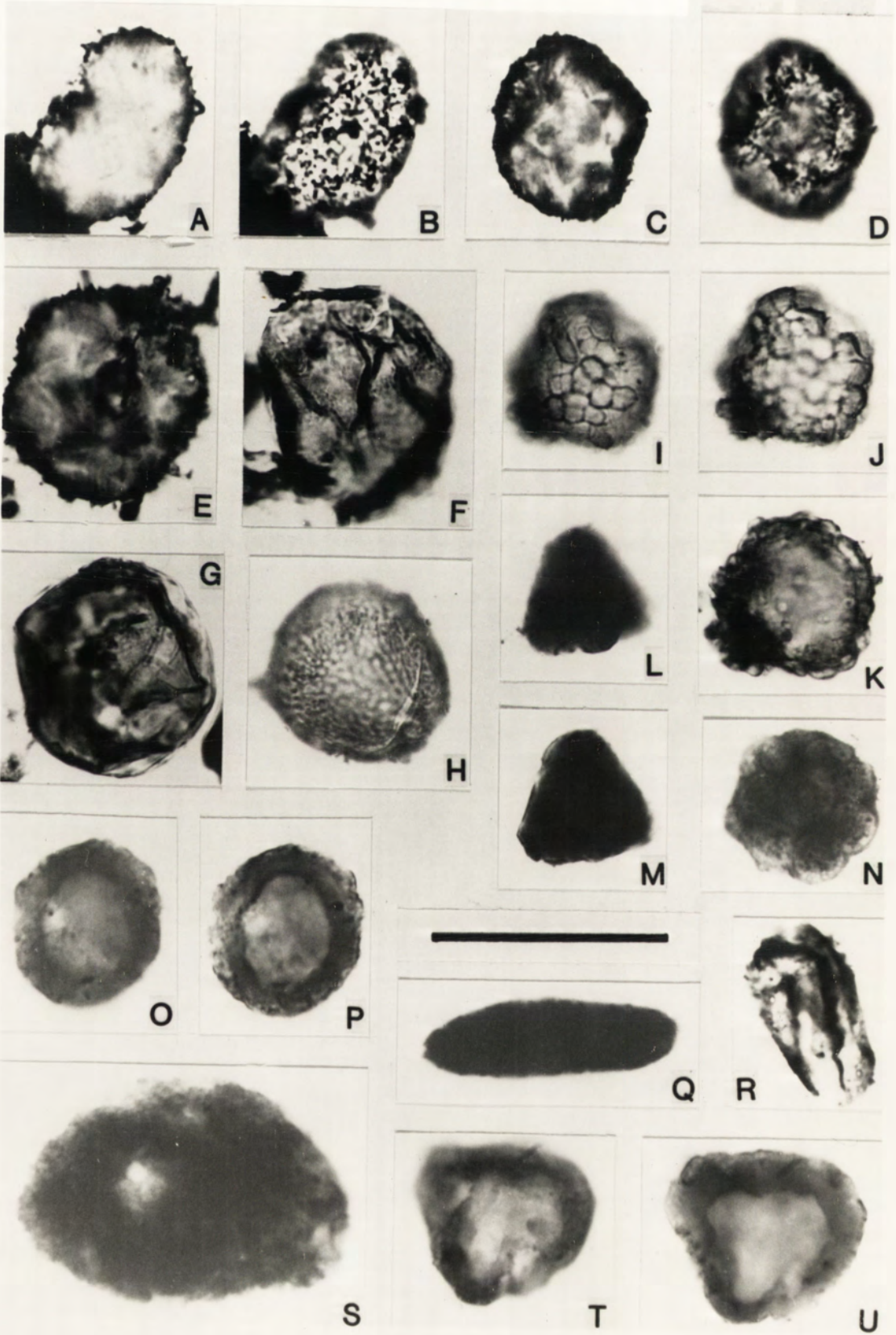


Plate XXVII

- Figs.A-F. *Navifusa crassa* (Sin et Liu, 1978) comb.
A. 85Y098-3, (9.5 x 113).
B. 85Y098-1, (4.5 x 97).
C. 85Y098-2, (7.5 x 107.5).
D. 85Y098-1, (10 x 103).
E. 85Y098-1, (4.3 x 99).
F. 85Y098-1, (4 x 100.5).
- Figs.G-H. *Lophosphaeridium tuberosum* sp. nov.
Two focus levels, 85Y098-2, (15.5 x 103.5).
- Fig.I. *Kildinosphaera chagrinata* Vidal, 1983
85Y098-1, (13.5 x 97.8).
- Figs.J, L. *Trachysphaeridium* sp.
J. 85Y098-2, (15 x 110.8).
L. 85Y098-1, (14.2 x 101).
- Fig.K. *Trematosphaeridium holedahlii* Timofeev, 1966
85Y098-1, (3.9 x 100.8).
- Figs.M-N. *Protoleiosphaeridium flexuosum* (Timofeev, 1966) comb.
M. 85Y098-1, (11 x 100.5).
N. 85Y098-3, (12.5 x 101).
- Fig.O. *Leiosphaeridia asperata* (Naumova) Lindgren, 1982
85Y098-3, (4.8 x 112.2).
- Fig.P. *Micrhystridium* sp.
85Y098-1, (12.2 x 103.3).
- Fig.Q. *Kildinosphaera granulata* Vidal, 1983
85Y098-3, (3.2 x 109.7).

All specimens from the Upper Sinian Jiucheng Member, Dengying Formation at the Wangjiawan section, Jinning County, Yunnan.

The scale bar below Fig.M is 31 μ m for M, and 20 μ m for all other specimens.

Plate XXVII

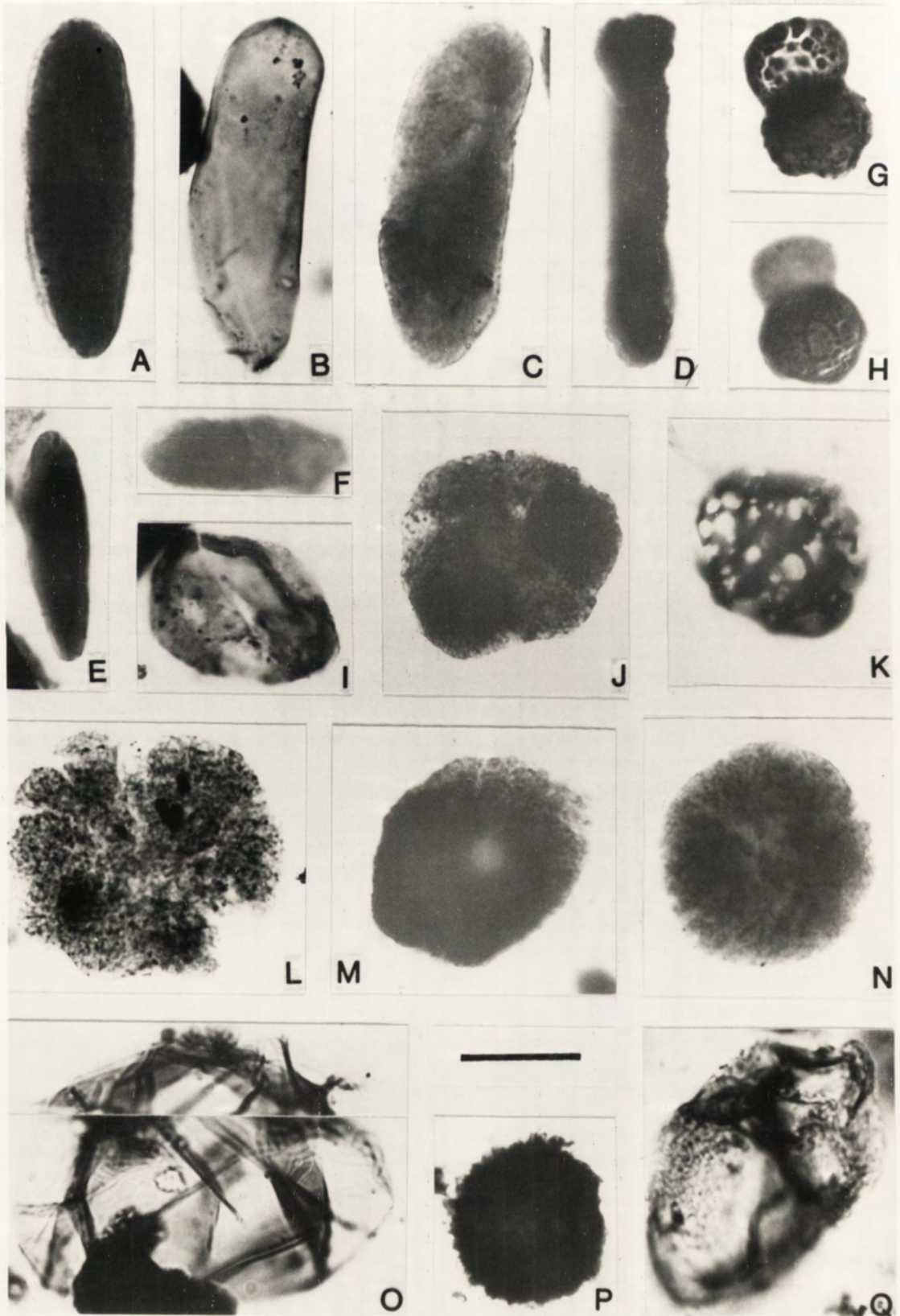


Plate XXVIII

Figs.A-B. *Skiagia orbiculare* (Volkova) Downie, 1982
85Y118.

Figs.C-H. *Skiagia ciliosa* (Volkova) Downie, 1982

- C. 85Y120-5, (8.7 x 106.8).
- D. 85Y120-5, (9.1 x 112.8).
- E. 85Y120-5, (6 x 97.1).
- F. 85Y120-5, (11.5 x 103.3).
- G. 85Y055-4, (19.1 x 106.5).
- H. 85Y120-5, (17.1 x 10).

Figs.I-P. *Skiagia* sp.

Displaying colony structure.

- I-J. Two focus levels. 85Y055, (10.8 x 109.5).
- K. 85Y199-3, (15.5 x 112).
- L. 85Y055-2, (18 x 110.7).
- M. 85Y055-6, (22.5 x 107).
- N. 85Y055-1, (5.2 x 98.8).
- O. 85Y055-1, (9 x 108.5).
- P. 85Y055-1, (10.5 x 112).

All specimens from the Lower Cambrian Yu'an-shan Member, Qiongzhusi Formation in Yunnan Province. A-F, H, K from the Qiongzhusi section near Kunming City; others from the Maotianshan Drill Core near Chengjiang County.

The scale bar below Fig.K is 4 μ m for B; 13 μ m for A and 20 μ m for others.

Plate XXVIII

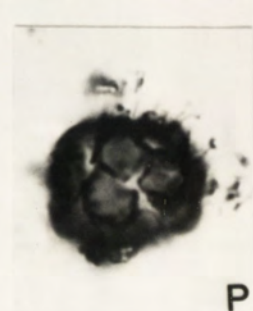
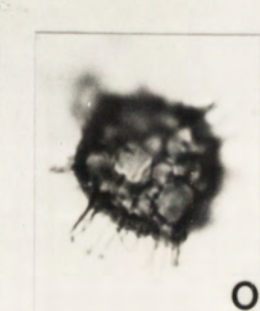
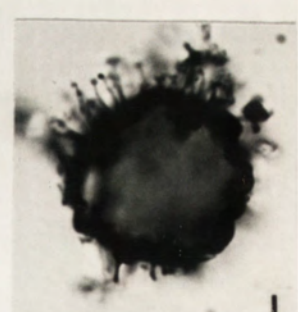
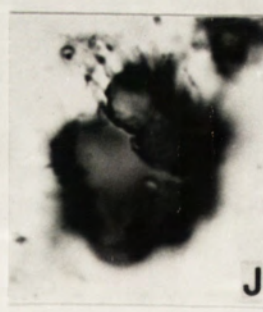
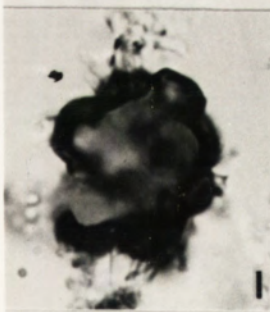
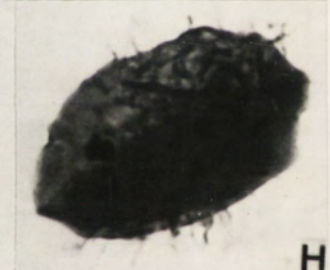
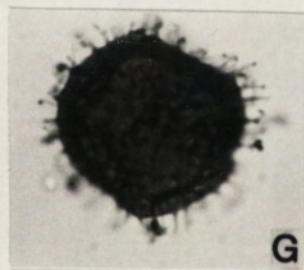
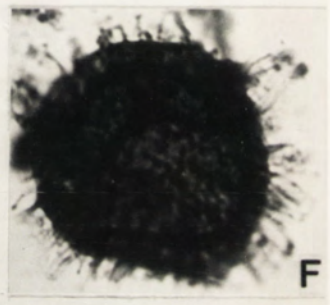
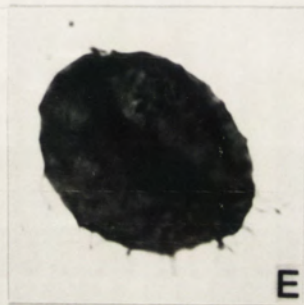
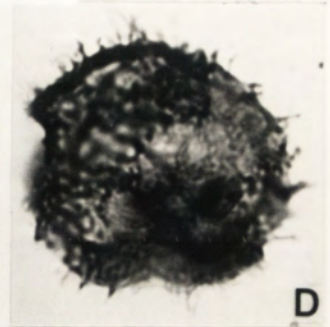
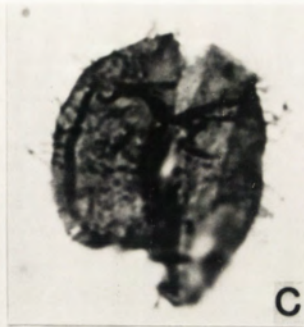
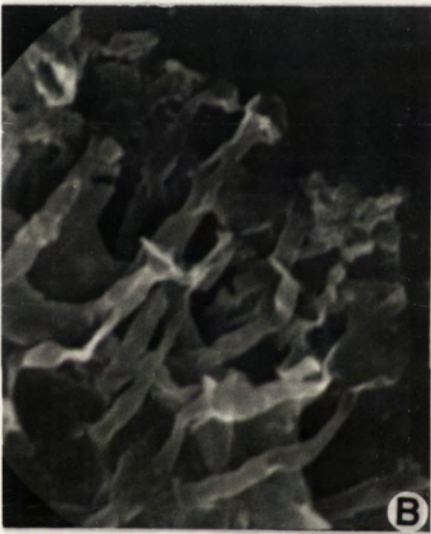
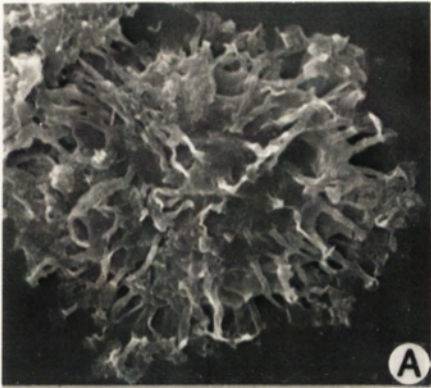


Plate XXIX

Figs.A-L. *Skiagia compressa* (Volkova) Downie, 1982

- A. 85Y118-4, (4.5 x 110).
- B. 85Y118-4, (19 x 100.2).
- C. 85Y118-2, (9.8 x 102.3).
- D. 85Y118-4, (9.4 x 109.1).
- E. 85Y120-4, (6.5 x 101.5).
- F. 85Y118-4, (14.5 x 105.8).

- G-H. 85Y118-1, (11 x 115.5).
- I. 85Y118-3, (14 x 103.5).
- J. 85Y118-4, (13.7 x 114.5).
- K-L. 85Y118-1, (5 x 102).

All specimens from the Lower Cambrian Yu'an Shan Member, Qiongzhusi Formation at the Qiongzhusi section near Kunming City, Yunnan.

The scale bar below Fig.I is 20 μ m for H. L and 40 μ m for other specimens.

Plate XXIX

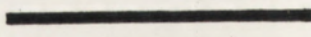
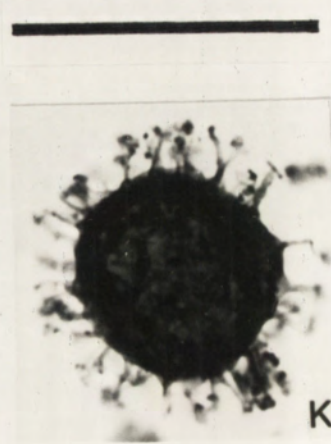
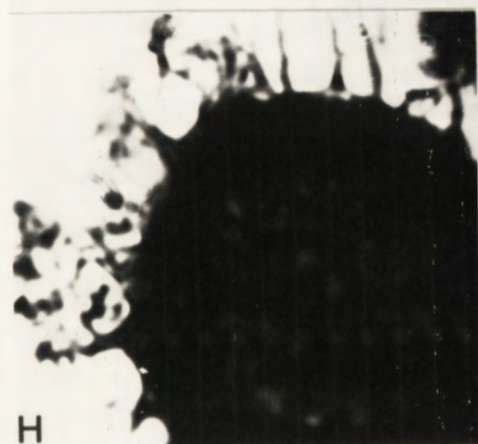
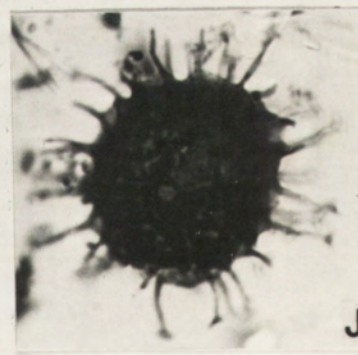
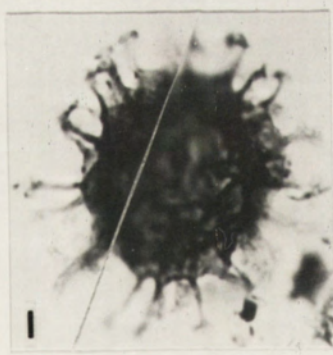
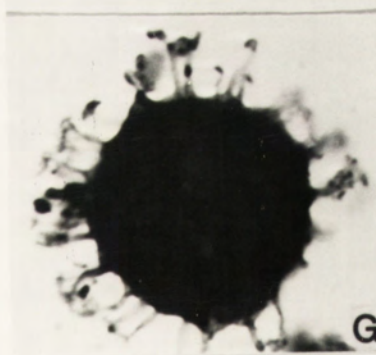
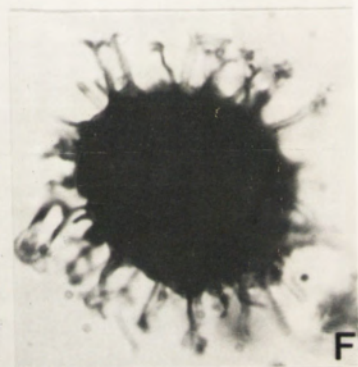
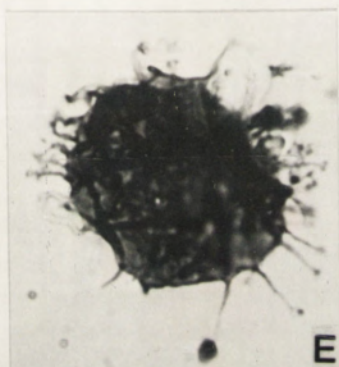
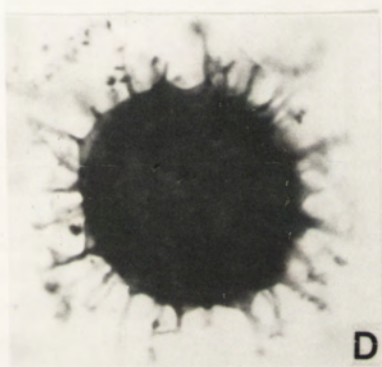
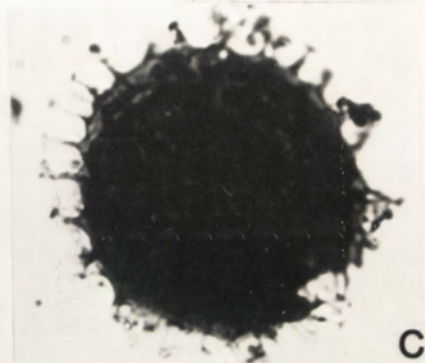
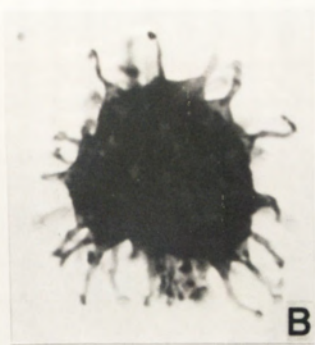
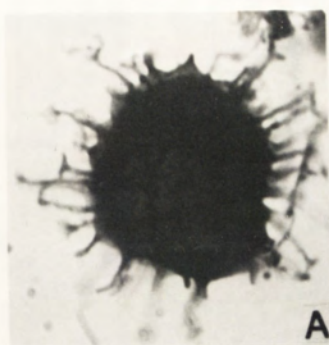


Plate XXX

Figs.A-G. *Skiagia orbiculare* (Volkova) Downie, 1982

- A. 85Y005-7, (18.9 x 108.6).
- B. 85Y119-4, (5 x 110).
- C. 85Y119-3, (20.2 x 102).
- D. 85Y055-5, (12.1 x 111.5).
- E. 85Y118-4, (14 x 120.1).
- F. 85Y055-6, (7.6 x 102.5).
- G. 85Y119-3, (13.5 x 104).

Figs.H-O. *Skiagia ornata* (Volkova) Downie, 1982

Displaying relatively long and thin processes. The processes of Fig.H are transitional.

- H. 85Y120-5, (6.8 x 109).
- I-J. 85Y055-5, (22.8 x 102.3).
- K-L. 85Y119-4, (14.5 x 101.8).
- M. 85Y120-4, (2.3 x 110.3).
- N. 85Y120-4, (6.5 x 101.5).
- O. 85Y055-5, (17 x 110.5).

All specimens from the Lower Cambrian Yu'an-shan Member, Qiongzhusi Formation in Yunnan Province. A, D, F, I-J, O from the Maotianshan Drill Core; others from the Qiongzhusi section.

The scale bar below Fig.B is 10 μ m for L and 20 μ m for other specimens.

Plate XXX

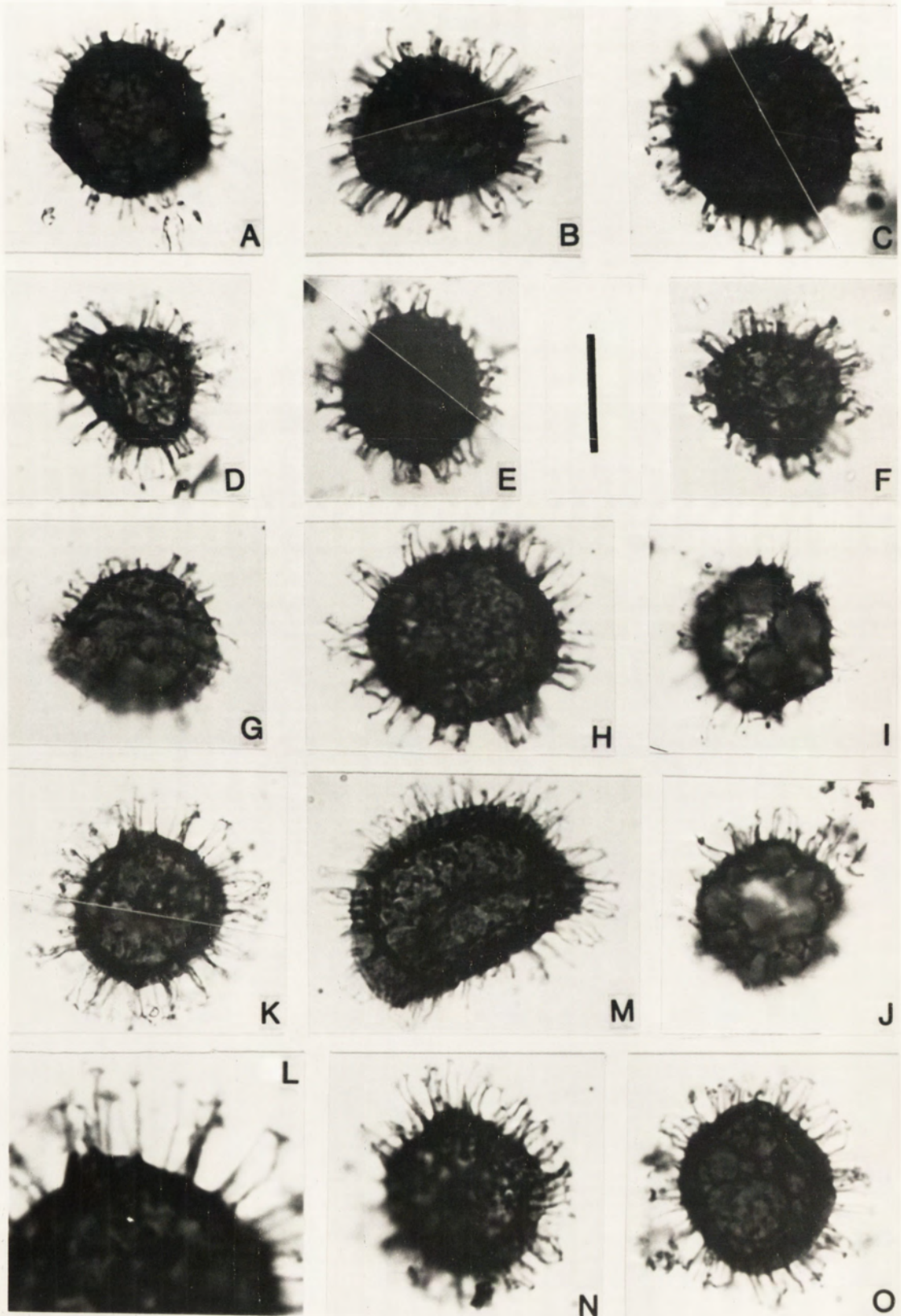


Plate XXXI

- Figs.A-L. *Skiagia ornata* (Volkova) Downie, 1982
H-I. Two focus levels. note the daughter cells.
- A. 85Y120-5, (16.4 x 99.5).
 - B. 85Y119-3, (16.3 x 112.6).
 - C. 85Y120-5, (10.6 x 103.7).
 - D. 85Y055-5, (3.7 x 102).
 - E. 85Y055-1, (16.7 x 103).
 - F. 85Y055-8, (8.2 x 102.1).
 - G. 85Y120-4, (5.5 x 99).
 - H-I. 85Y120-4, (4.2 x 114.5).
 - J. 85Y055-2, (7.6 x 106.8).
 - K. 85Y055-1, (16.7 x 103).
 - L. 85Y120-4, (13.4 x 98.2).

All specimens from the Lower Cambrian Yu'an-shan Member, Qiongzhusi Formation in Yunnan Province; D-F, J-K from the Maotianshan Drill Core and others from the Qiongzhusi section.

The scale bar below Fig.H is 40 μ m for all specimens.

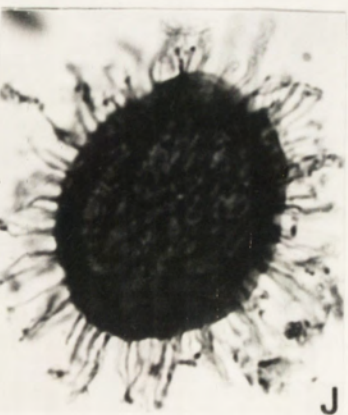
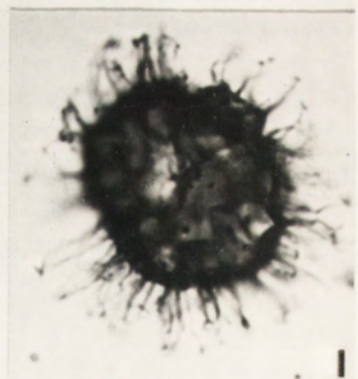
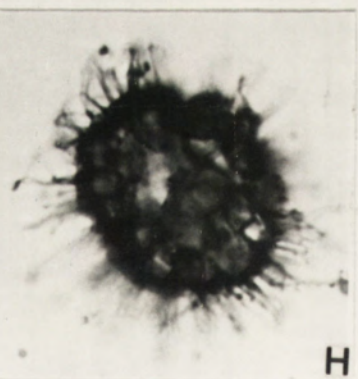
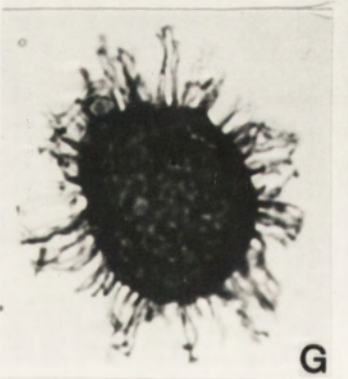
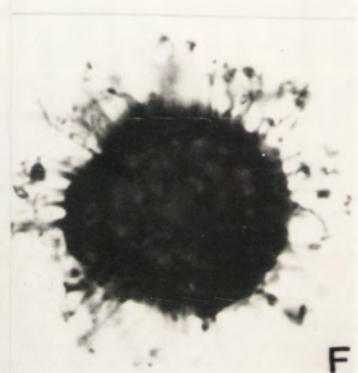
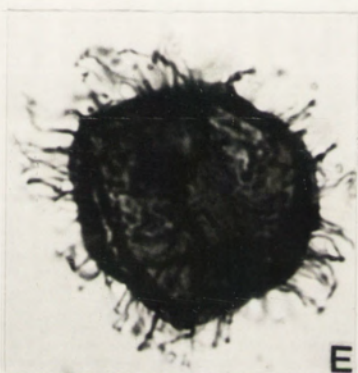
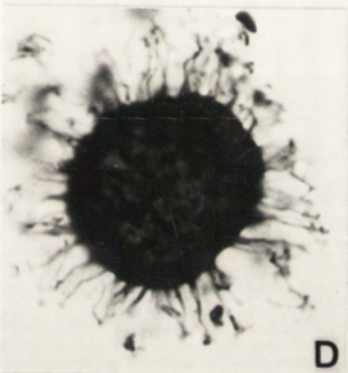
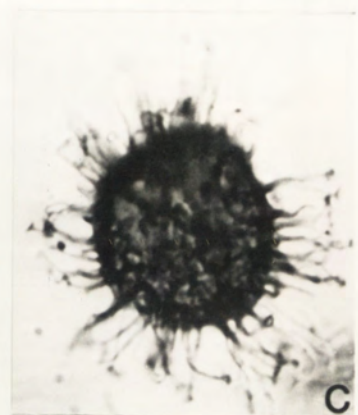
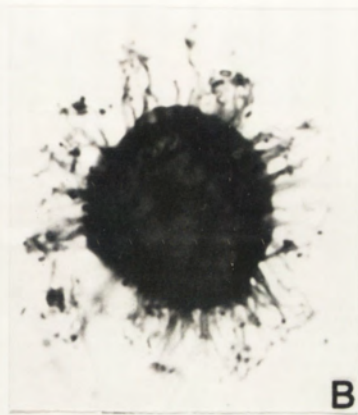
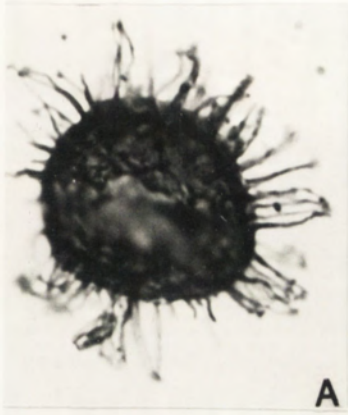


Plate XXXII

Figs.A-B. *Skiagia cf. insigne* (Fridrichsone) Downie, 1982
Two focus levels, 85Y118-1, (13 x 95.6).

Figs.C-J. *Skiagia scottica* Downie, 1982

- C. 85Y119-4, (8.2 x 104).
- D. 85Y119-4, (15.3 x 115).
- E. 85Y119-4, (15 x 107).
- F. 85Y055-3, (15.7 x 115.5).
- G. 85Y119-4, (9.8 x 105).
- H. 85Y119-4, (6.8 x 107.2).
- I. 85Y055-1, (15 x 110.8).
- J. 85Y055-7, (14 x 105).

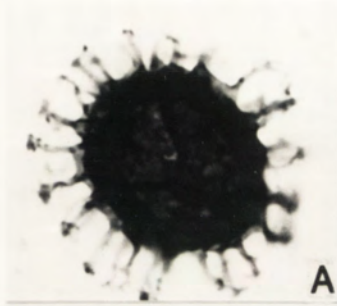
Figs.K-N. *Skiagia ornata* (Volkova) Downie, 1982

- K. 85Y119-3, (15.5 x 107).
- L. 85Y119-5, (20.5 x 101).
- M. 85Y119-2, (6 x 107).
- N. 85Y119-1, (9 x 100).

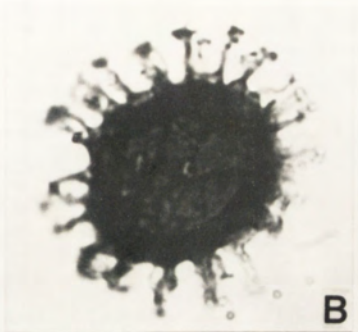
All specimens from the Lower Cambrian Yu'an-shan Member, Qiongzhusi Formation in Yunnan Province; F. I-J from the Maotianshan Drill Core and others from the Qiongzhusi section.

The scale bar below Fig.L is 40 μ m for all specimens.

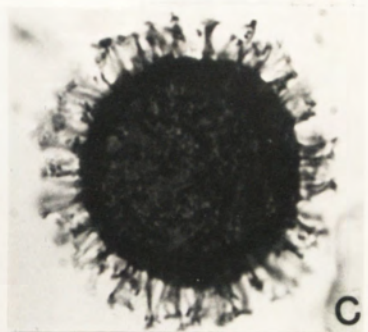
Plate XXXII



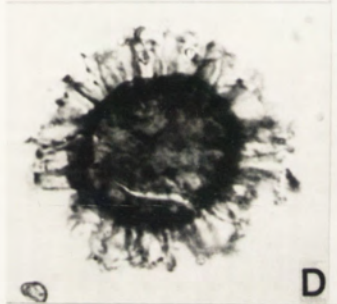
A



B



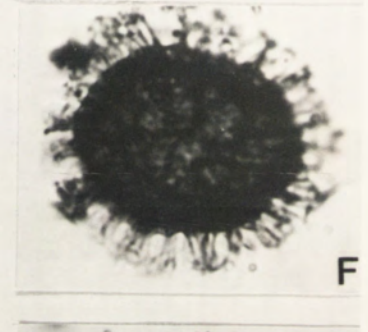
C



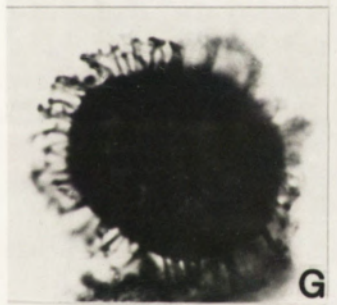
D



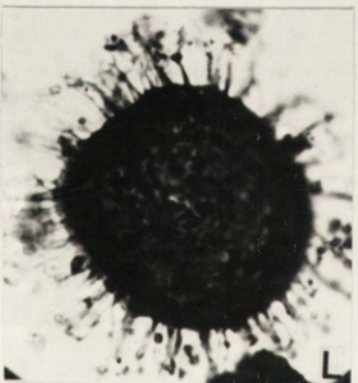
E



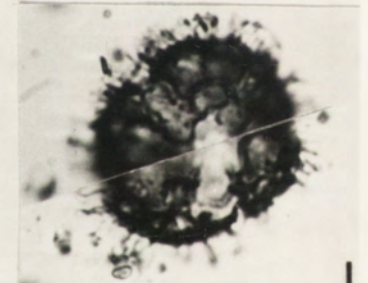
F



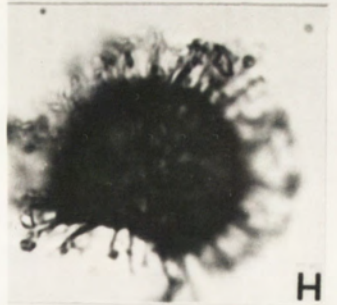
G



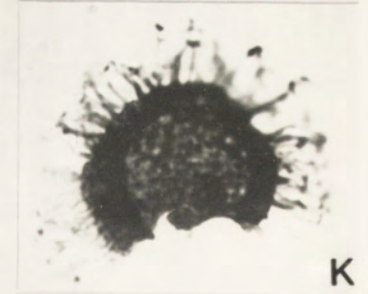
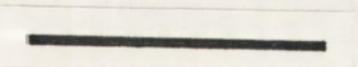
L



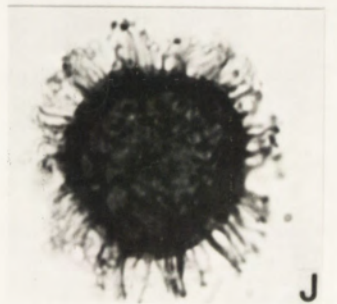
I



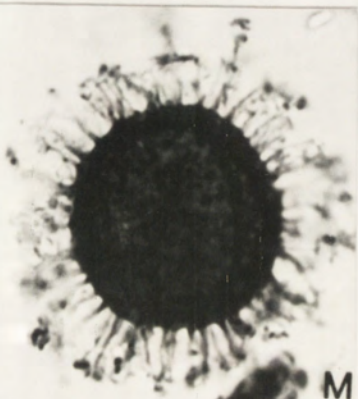
H



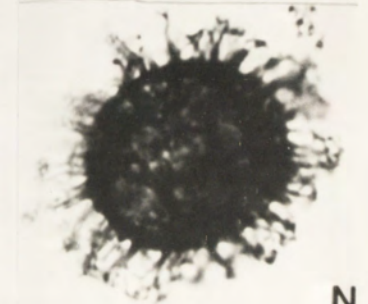
K



J



M



N

Plate XXXIII

Figs.A-D, J-K. *Goniosphaeridium* sp.

- A. 85Y055-4, (9.1 x 112.4).
- B. 85Y055-7, (5.3 x 106.2).
- C. 85Y055-8, (9.3 x 104.5).
- D. 85Y055-4, (19.5 x 100.8).
- J. 85Y055-7, (20.5 x 110.5).
- K. 85Y055-1, (6 x 106).

Fig.E. *Goniosphaeridium* sp.

Note the double walls of the processes which open into the vesicle cavity. 85Y055-2, (4.2 x 107).

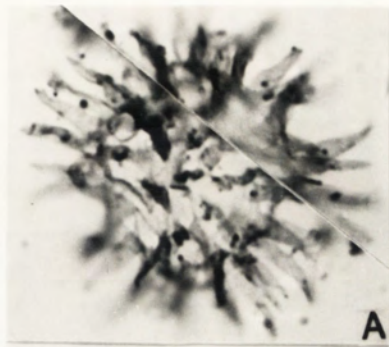
Figs.F-I, L-N. *Liepaina chengjiangensis* sp. nov.

- F. 85Y055-7, (4 x 112).
- G. 85Y055-7, (8 x 104).
- H-I. Two focus levels. 85Y055-1, (10.5 x 96).
- L. 85Y055-6, (7 x 97.7).
- M. 85Y055-1, (12.2 x 112.2).
- N. 85Y055-7, (19.5 x 112).

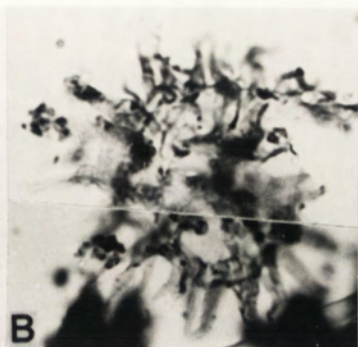
All specimens from the Lower Cambrian Yu'an-shan Member, Qiongzhusi Formation at the Maotianshan Drill Core near Chengjiang County, eastern Yunnan.

The scale bar below Fig.H is 20 μ m for A. D-I, L-M and 31 μ m for B-C, J-K, N.

Plate XXXIII



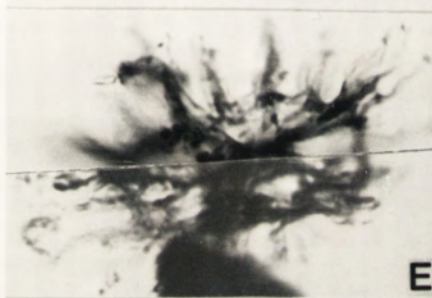
A



B



C



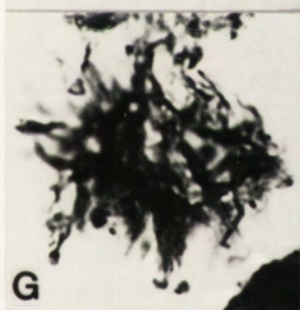
E



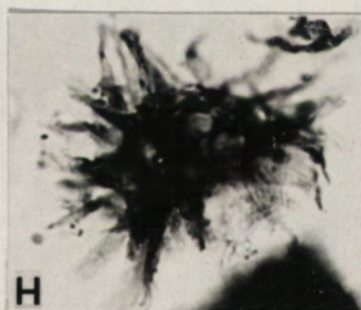
D



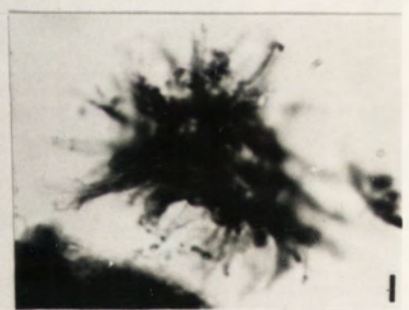
F



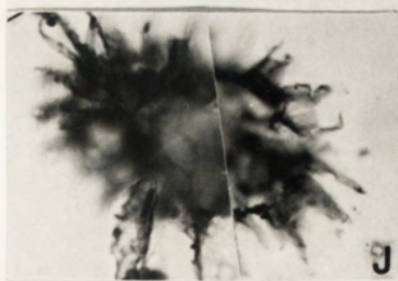
G



H



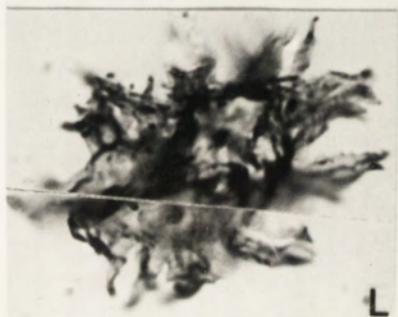
I



J



K



L



M



N

Plate XXXIV

- Figs.A-E. *Goniosphaeridium cf. implicatum* (Firdrichsone) Downie, 1982.
A-B. Two focus levels, 85Y055-4, (20.5 x 110.6).
C. 85Y055-1, (19.5 x 110).
D. 85Y055-7, (15.3 x 102).
E. 85Y055-1, (20 x 100.5).
- Fig.F. Unnamed specimen.
85Y119-3, (18.8 x 109.5).
- Figs.G-J. *Baltisphaeridium* sp.
G. 85Y119-5, (10.7 x 102.7).
H. 85Y119-5, (19.5 x 102.8).
I. 85Y119-2, (17.5 x 110.5).
J. 85Y119-4, (3.8 x 112.5).
- Figs.K-P. *Baltisphaeridium cerinum* Volkova, 1968
K. 85Y120-4, (3 x 113).
L. 85Y120-4, (13 x 108).
M. 85Y055-6, (9 x 106).
N. 85Y119-5, (12 x 105).
O. 85Y119-4, (10.5 x 112).
P. 85Y120-4, (9 x 102.7).

All specimens from the Lower Cambrian Yu'an-shan Member, Qiongzhusi Formation in eastern Yunnan; A-E, M from the Maotianshan Drill Core and others from the Qiongzhusi section.

The scale bar below Fig.D is 20 μ m for A-C, G-P and 31 μ m for D-F.

Plate XXXIV

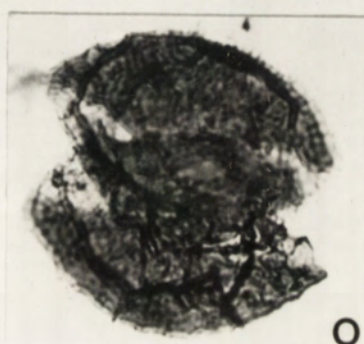
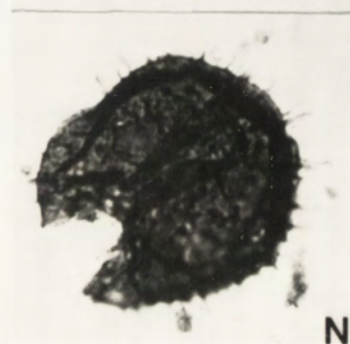
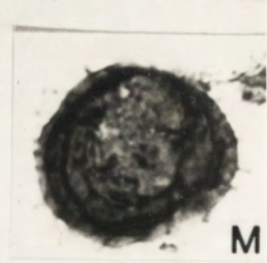
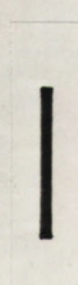
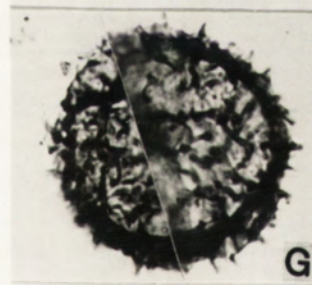
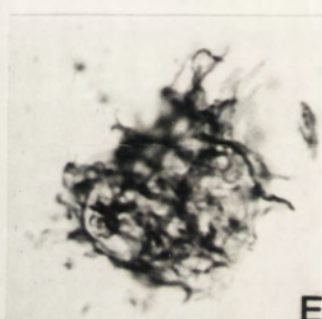
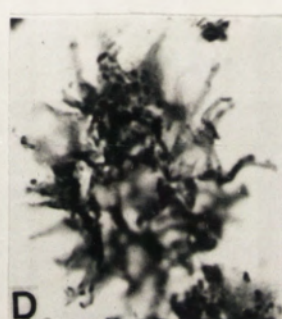
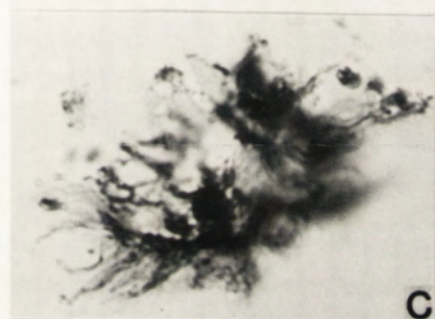
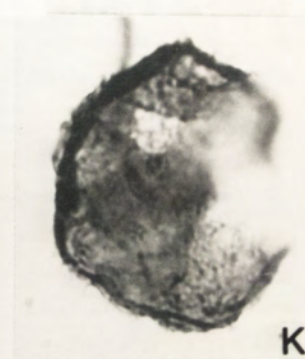
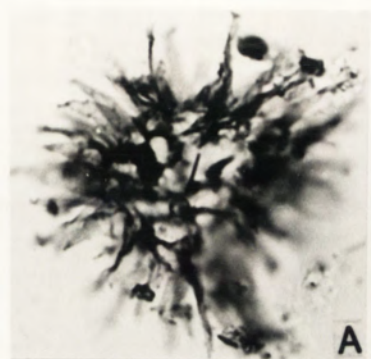


Plate XXXV

Figs.A-F, K. *Baltisphaeridium latviense* Volkova, 1974

- A. 85Y118.
- B. 85Y119-1, (14.8 x 104).
- C. 85Y119-4, (6.2 x 100).
- D. 85Y120-4, (15.5 x 114).
- E. 85Y119-4, (17 x 112.7).
- F. 85Y119-2, (13.7 x 105).
- K. 85Y055-6, (10.8 x 115).

Fig.G, L. *Baltisphaeridium ?dubium* Volkova, 1968

- G. 85Y043-1, (17 x 112.7).
- L. 85Y119-4, (19 x 112.5).

Figs.H-I. *Micrhystridium tornatum* Volkova, 1968

- H. 85Y118-5, (8.8 x 93.6).
- I. 85Y118-5, (10.6 x 102.1).

Figs.J, N-O. *Micrhystridium circulapertum* sp. nov.

- J. 85Y055-7, (7.8 x 104).
- N. 85Y113-2, (11.5 x 112).
- O. 85Y119-5, (21.7 x 99.2).

Fig.M. *Micrhystridium spinosum* Volkova, 1969

85Y055-7, (18.9 x 112).

Fig. P. Unnamed specimen.

85Y120-1, (5 x 105).

Fig. Q. *Lophosphaeridium* sp.

85Y113-1, (9.7 x 107.7).

Fig.R. *Tasmanites ?* sp.

85Y119-2, (10 x 98.5).

All specimens from the Lower Cambrian Yu'an-shan Member, Qiongzhusi Formation in eastern Yunnan; G, J and M from the Maotianshan Drill Core and others from the Qiongzhusi section.

The scale bar below L is 40 μ m for R and 20 μ m for all other specimens.

Plate XXXV

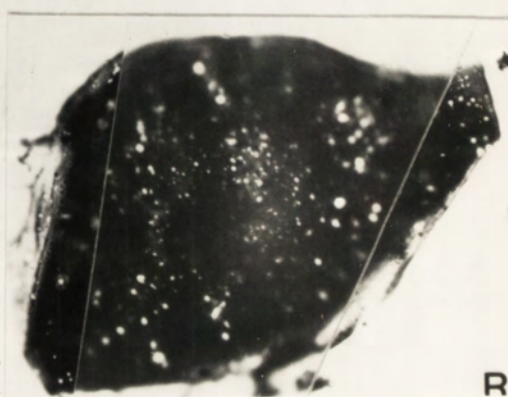
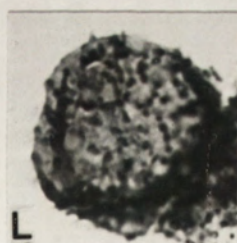
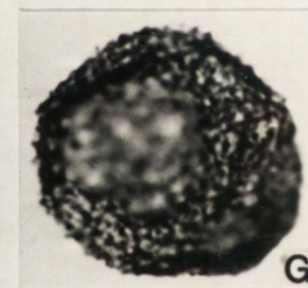
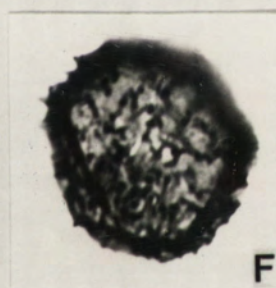
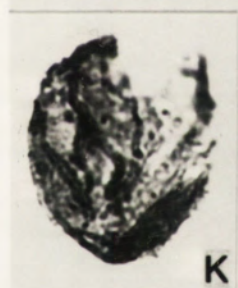
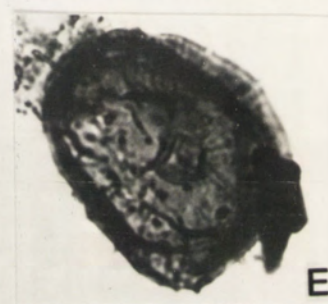
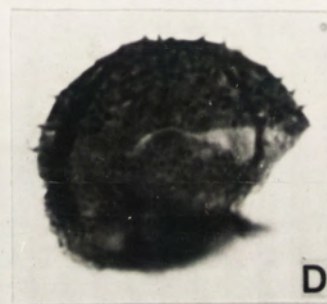
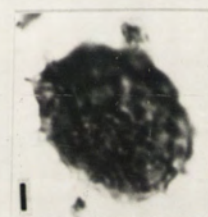
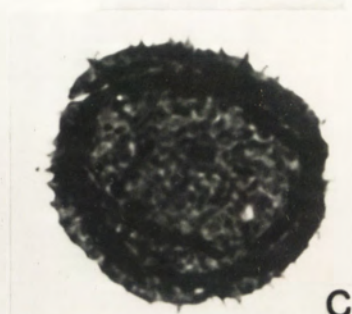
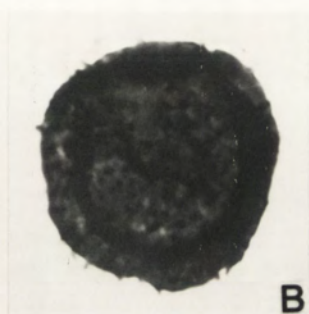
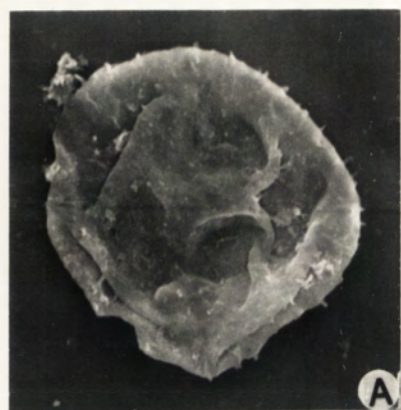


Plate XXXVI

Figs.A-E. *Comaspheridium strigosum* (Jankauskas) Downie, 1982

- A. 85Y043-1, (22.5 x 108.8).
- B. 85Y043-6, (15 x 115).
- C. 85Y043-5, (21.4 x 107).
- D. 85Y043-3, (5.2 x 111.8).
- E. 85Y043-5, (4.5 x 108).

Figs.F-M. *Ooidium qiongzhusiense* sp. nov.

- I. Holotype.
- F. 85Y043-5, (18.2 x 105.5).
- G. 85Y043-5, (5.7 x 104.5).
- H. 85Y043-5, (11.6 x 106.5).
- I. 85Y043-1, (13.2 x 100.7).
- J. 85Y043-3, (5.2 x 111.8).
- K. 85Y043-1, (23 x 111.6).
- L. 85Y043-5, (4 x 105).
- M. 85Y043-2, (15.1 x 102).

All specimens from the Lower Cambrian Yu'an-shan Member, Qiongzhusi Formation at the Maotianshan Drill Core near Chengjiang County, eastern Yunnan.

The scale bar below Fig.I is 40 μ m for all specimens.

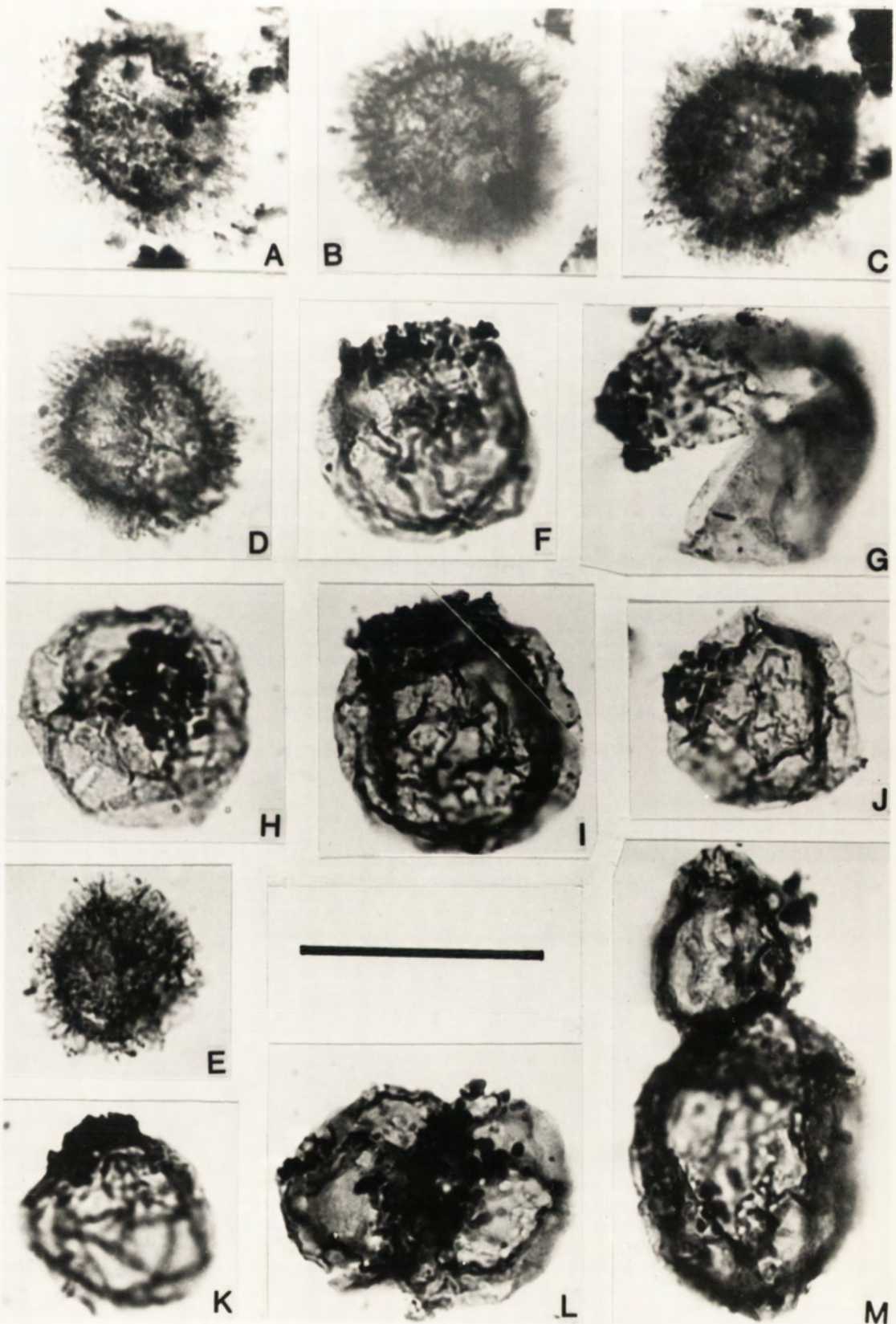


Plate XXXVII

- Figs.A-C. *Leiosphaeridia asperata* (Naumova) Lindgren, 1982
A. 85Y055-5, (9.8 x 104.7).
B. 85Y043-5, (16.8 x 108.3).
C. 85Y055-5, (14.5 x 107.5).
- Figs.D, J. *Kildinosphaera chagrinata* Vidal, 1983
D. 85Y055-3, (7 x 117.8).
J. 85Y055-7, (16.5 x 115).
- Fig.E. *Stictosphaeridium* sp.
95Y043-5, (5.7 x 104.5).
- Figs.F-I. *Kildinosphaera granulata* Vidal, 1983
F. 85Y043-1, (17 x 113.1).
G. 85Y043-3, (6 x 115).
H. 85Y043-4, (18 x 110).
I. 85Y043-4, (6 x 109).
- Fig.K. *Kildinosphaera verrucata* Vidal, 1983
85Y043-5, (6.2 x 107).
- Fig.L. *Archaeodiscina umbonulata* Volkova, 1968
85Y055-2, (10.5 x 112.5).

All specimens from the Lower Cambrian Yu'an-shan Member, Qiongzhusi Formation at the Maotianshan Drill Core near Chengjiang County, eastern Yunnan.

The scale bar below Fig.H is 50 μ m for H and 40 μ m for other specimens.

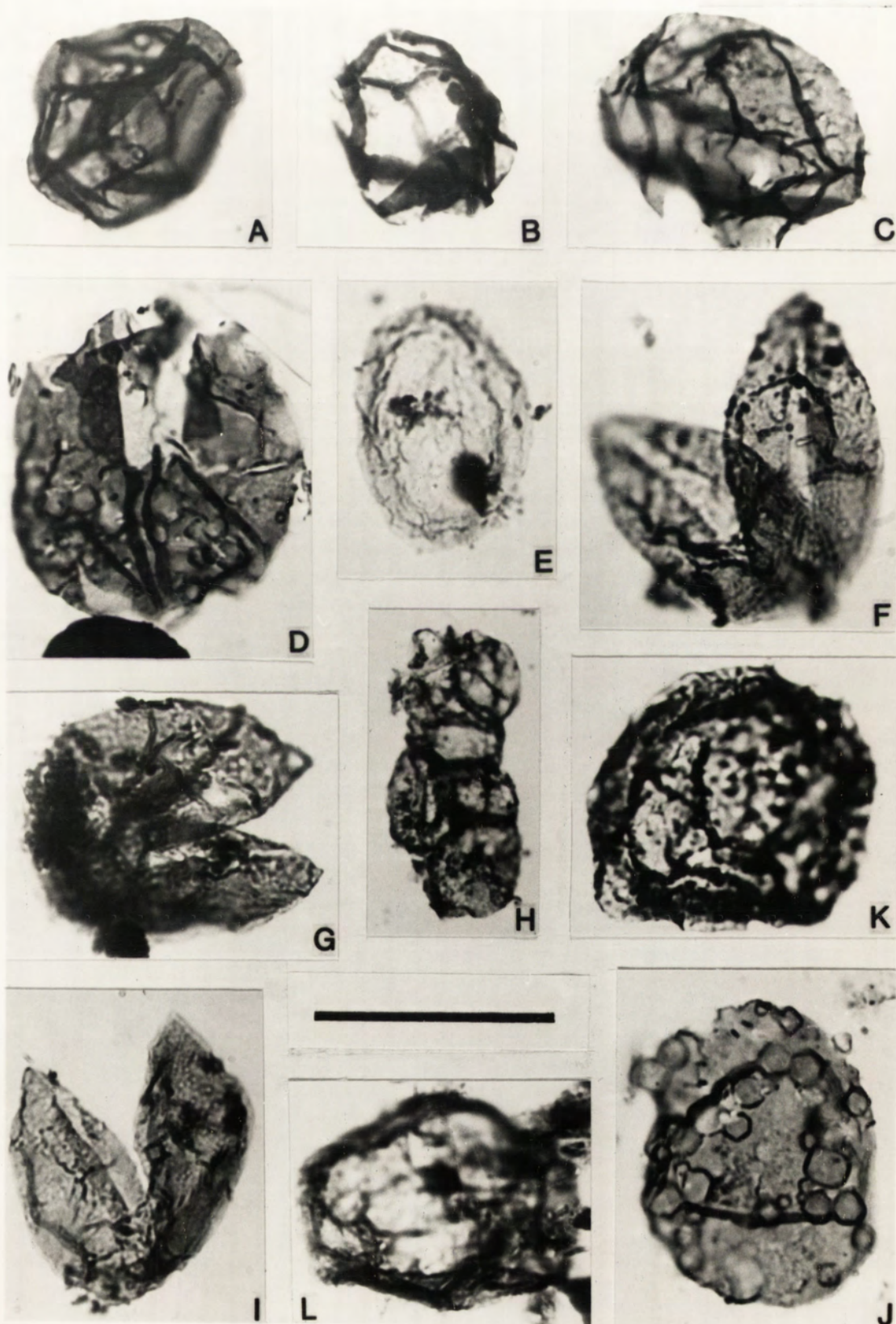


Plate XXXVIII

- Fig.A. *Trachysphaeridium levis* (Lopukkin) Vidal, 1974
85Y002-1, (9 x 110).
- Figs.B-C. *Trachysphaeridium* cf. *laminaritum* (Timofeev) Vidal, 1976
B. 85Y043-3, (5.1 x 115.4).
C. 85Y043-5, (7 x 97).
- Fig.D. *Trachysphaeridium* sp.
85Y120-1, (6.3 x 104).
- Fig.E. *Protosleiophaeridium densum* (Timofeev, 1966) comb.
Sample No. 85Y120.
- Figs.F-G. *Protosleiophaeridium papyraceum* (Timofeev, 1966) comb.
F. 85Y055-6, (6 x 95.1).
G. 85Y055-2, (15 x 102).
- Fig.H. *Protoleiosphaeridium flexuosum* (Timofeev, 1966) comb.
85Y055-3, (13.5 x 102).
- Fig.I. *Alliumella baltica* Vanderflit, 1971
85Y055-7, (7.4 x 117.5).
- Fig.J. *Dictyotidium* sp.
85Y119-3, (11 x 107).
- Figs.K-M. *Lophosphaeridium tuberosum* sp. nov.
K. 85Y043-5, (10.5 x 111.5).
L-M. Two focus levels, 85Y119-5, (18 x 97.2).
- Fig.N. *Stictosphaeridium* sp.
85Y043-3, (18 x 110).
- Fig.O. *Sinianella scabrata* sp. nov.
85Y119-4, (12 x 109).
- Fig.P *Kildinosphaera granulata* Vidal, 1983
85Y043-5, (24 x 109.5).

All specimens from the Lower Cambrian Yu'an-shan Member, Qiongzhusi Formation in eastern Yunnan; A, D-E, J, O from the Qiongzhusi section and others from the Maotianshan Drill Core.

The scale bar below Fig.K is 31 μ m for E and 20 μ m for all other specimens.

Plate XXXVIII

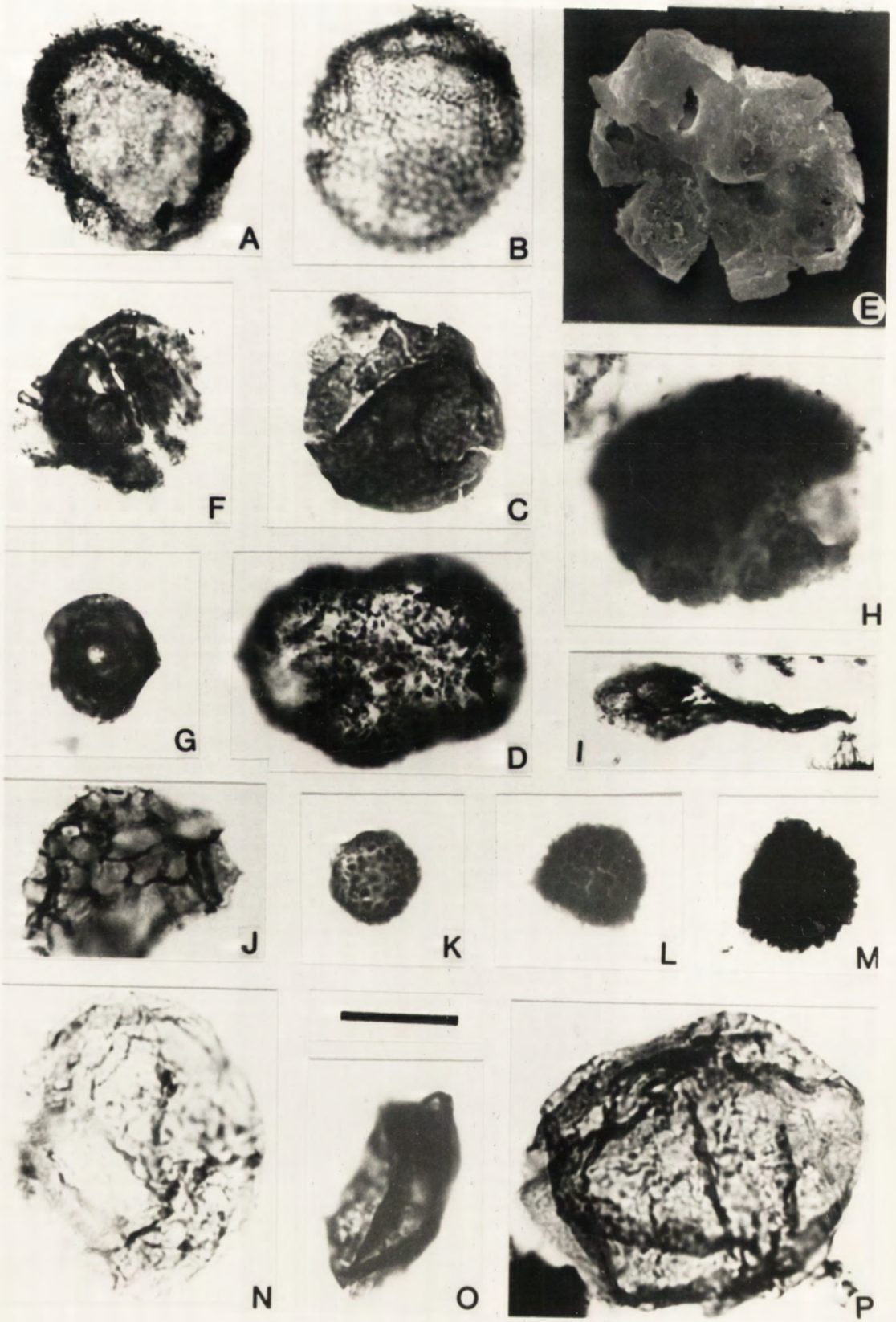


Plate XXXIX

- Figs.A-R. *Pyritosphaera barbaria* Love, 1957
- A. 85Y111-1, (16.5 x 105.5).
 - B. 85Y111-2, (7.6 x 111.3).
 - C. 85Y004-1, (14.5 x 110.5).
 - D. 85Y002-1, (17 x 112.8).
 - E. 85Y111-3, (4.1 x 101).
 - F. 85Y111-2, (9.3 x 102).
 - G. 85Y055-1, (15.5 x 113).
 - H-I. Two focus levels. 85Y111-2, (5 x 106.5).
 - J. 85Y111-3, (12.8 x 108)l
 - K. 85Y111-1, (17.3 x 103.1).
 - L. 85Y111-3, (7.1 x 100.5).
 - M. 85Y111-1, (12.1 x 101.5).
 - N. 85Y111-3, (4.1 x 100.3).
 - O. 85Y055-1, (18 x 96).
 - P. 85Y111-3, (14.2 x 96.8).
 - Q. 85Y118-5, (19.1 x 100).
 - R. 85Y111-2, (6.4 x 108.2).

All specimens from the Lower Cambrian Yu'an-shan Member, Qiongzhusi Formation in eastern Yunnan; D-D from the Meishucun section, G, O from the Maotianshan Drill Core and the others from the Qiongzhusi section.

The scale bar below Fig.N is 20 μ m for all specimens.

Plate XXXIX

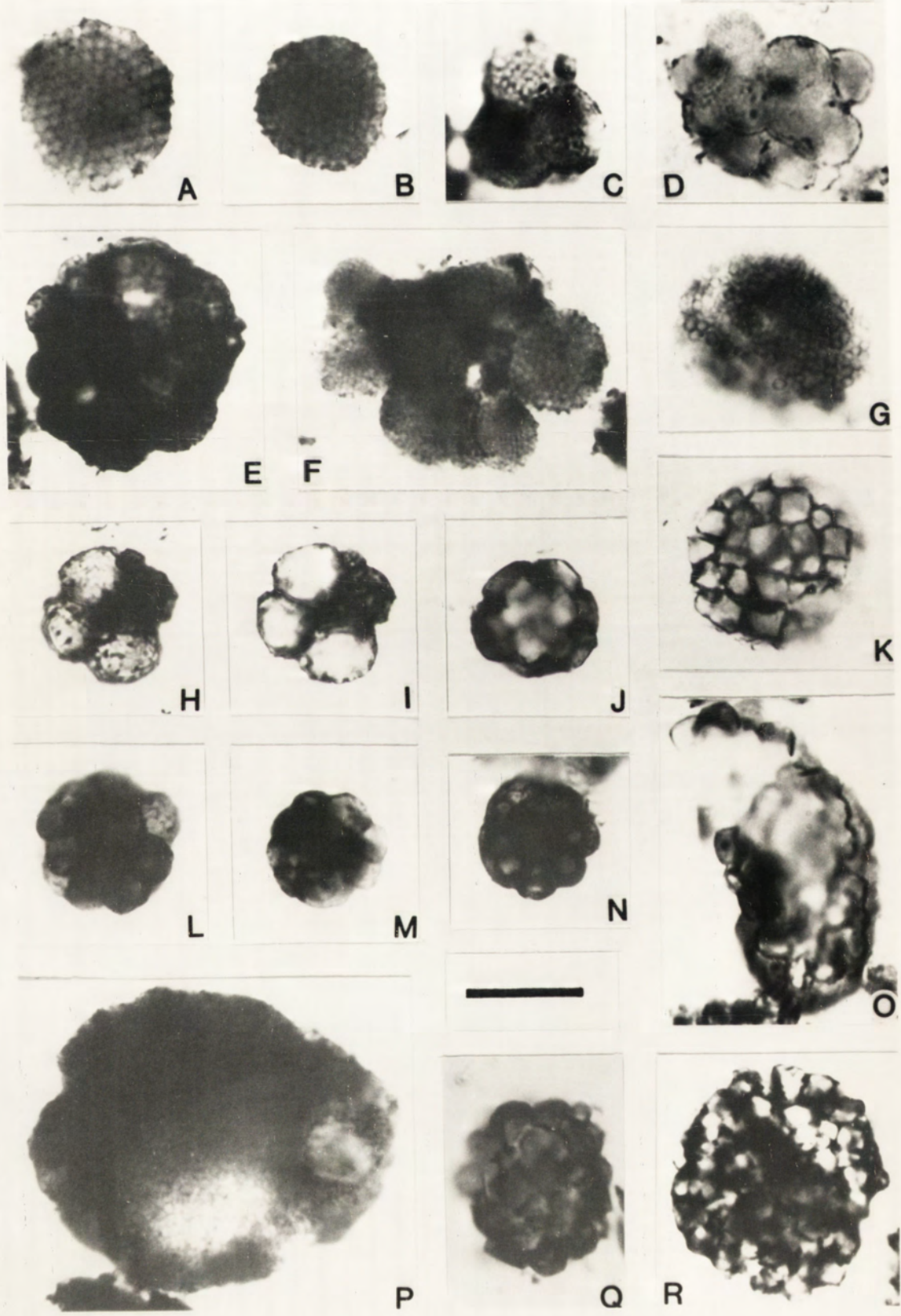


Plate XL

- Figs.A-G. *Pyritosphaera barbaria* Love, 1957
Note B, D displaying external membrane.
A-B. Two focus levels, 85Y111-3, (6.6 x 105.7).
C-D. Two focus levels, 85Y111-3, (10.3 x 107.5).
E. 85Y111-3, (4.5 x 105.5).
F. 85Y111-3, (7.8 x 102.1).
G. 85Y111-3, (10.6 x 107.5).
- Figs.H-I. *Navifusa crassa* (Sin et Liu, 1978) comb.
H. 85Y113-1, (11 x 107.3).
I. 85Y111-3, (14.8 x 95.8)
- Figs.J-N. *Eomycetopsis robusta* (Schopf) Knoll et Golubic, 1979
J. Displaying damaged ribbon.
N. Spinose form is *Skiagia*.
J. 85Y055-6, (6 x 101.6).
K. 85Y055-1, (17.8 x 96).
L. 85Y119-4, (12.8 x 103.3).
M. 85Y055-3, (5.3 x 106.2).
N. 85Y119-3, (16 x 104.3).
- Figs.O-P. *Siphonophycus* sp.
O. 85Y043-3, (6 x 106).
P. 85Y043-6, (17 x 107.6).

All specimens from the Lower Cambrian Yu'an-shan Member, Qiongzhusi Formation in eastern Yunnan; J-K, M, O-P from the Maotianshan Drill Core and the others from the Qiongzhusi section.

The scale bar below Fig.L is 20 μ m for A-J and 31 μ m for K-P.

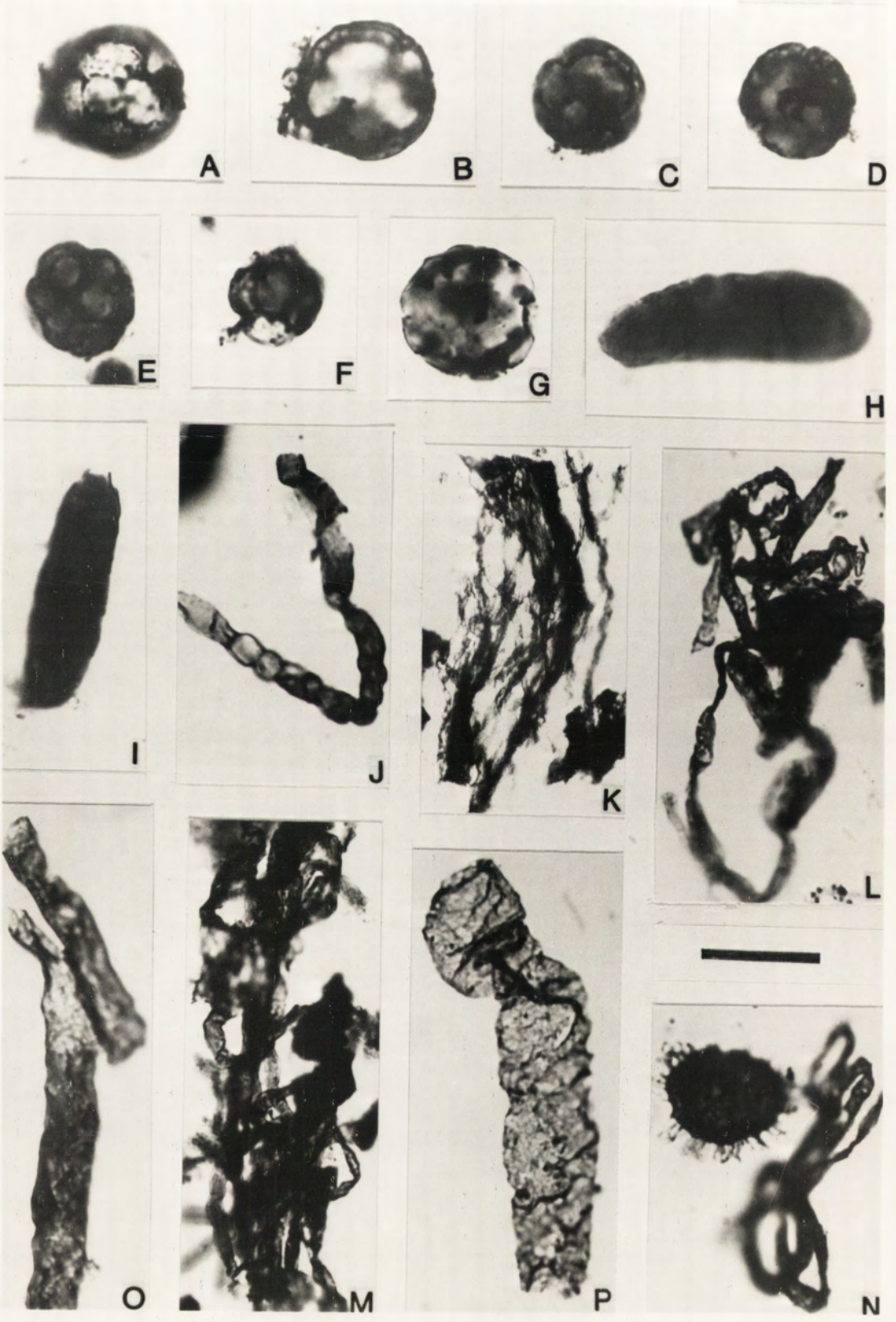


Plate XLI

- Fig.A. *Gorgonisphaeridium* ? sp.
Tian-1, (13.8 x 101.2).
- Figs.B-C. *Sinianella scabrata* sp. nov.
B. 83H144-1, (9.8 x 111.8).
C. 83H144-4, (13 x 102.1).
- Figs.D-F. *Kildinosphaera* sp.
D. 83H144-3, (19.5 x 115).
E. 85H144-4, (17 x 107.8).
F. 83H144-3, (21.7 x 101.3).
- Figs.G, I. Vase-shaped specimens.
G. Tian-1, (11.6 x 106.8).
I. Tian-1, (9.6 x 105).
- Fig.H. *Protoleiosphaeridium laccatum* (Timofeev, 1966) comb.
Tian-1, (9.3 x 103).
- Fig.J. *Synsphaeridium* sp.
83H144-6, (18 x 105).
- Fig.K. *Siphonophycus* sp.
83H144-2, (14.2 x 112).
- Fig.L. *Pyritosphaera barbaria* Love, 1957
83H144-6, (20.5 x 106.6).
- Fig.M. Unnamed specimen.
Note the double walls. 83H144-6, (10.5 x 120).
- Figs.N-P. *Kildinosphaera granulata* Vidal, 1983
N. 83H144-1, (17.5 x 113.5)
O. 83H144-4, (4.8 x 105.4).
P. 83H144-3, (19 x 111).
- Fig.Q. *Eomycetopsis robusta* (Schopf) Knoll et Golubic, 1979
83H144-2, (18.3 x 106).

All specimens from the Huangshandong section in the Yangtze Gorges near Yichang City, Hubei; A, G-I from the Lower Cambrian Tianzhushan Member and the others from the Lower Cambrian Shipai Formation.

The scale bar below Fig.C is 16 μ m for A, G-I; 31 μ m for J, K, Q and 20 μ m for other specimens.

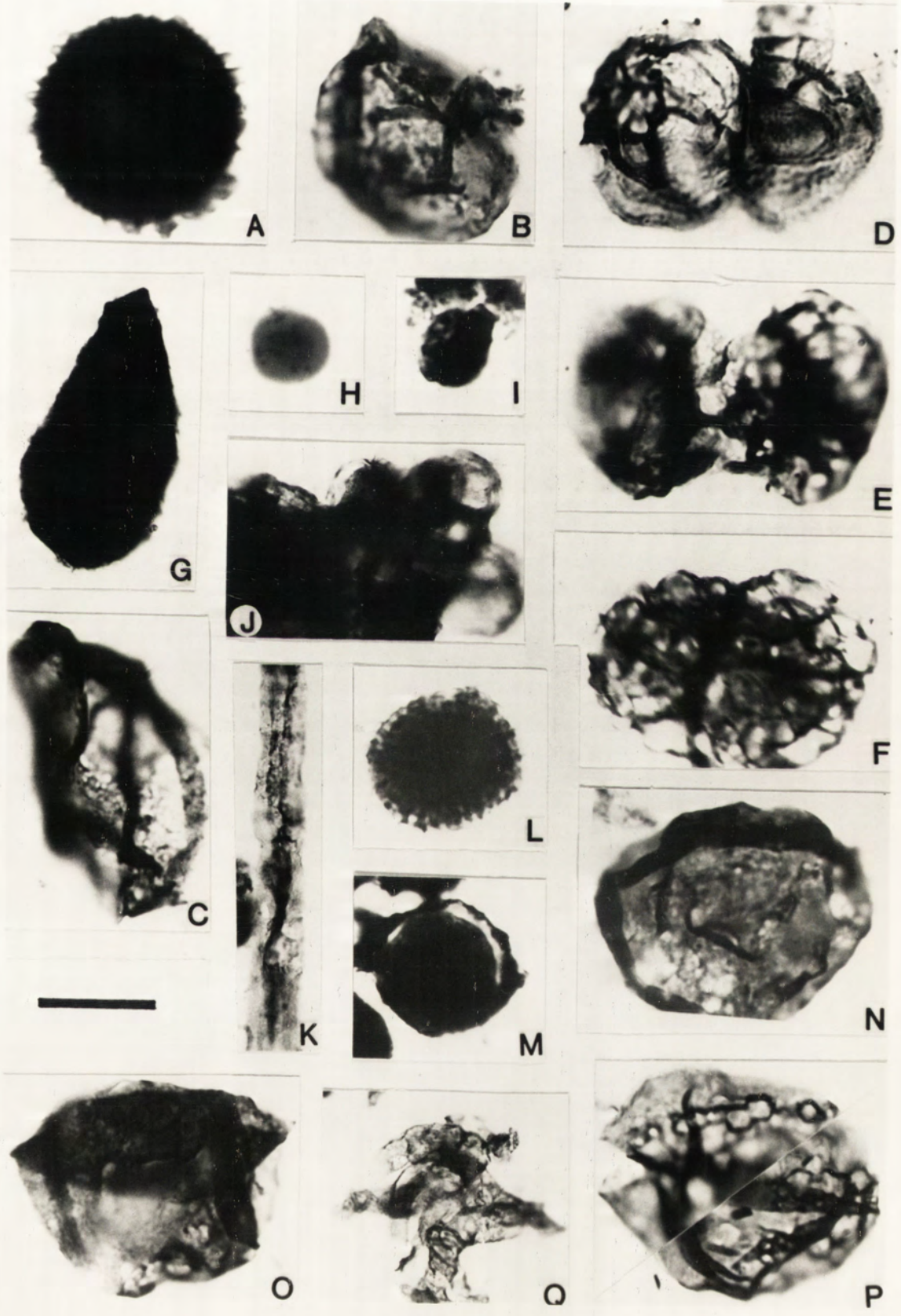


Plate XLII

- Figs. A-D. *Trachyhystrichosphaera* sp.
A-B. MOP403.
C. MOP403-18, (4 x 109.5).
D. 86Z043-1, (20.4 x 100).
- Fig. E. *Micrhystridium circulapertum* sp. nov.
MOP403-16, (14x105.8).
- Figs.F-M. *Micrhystridium geminatum* sp. nov.
F-G. MOP403-17, (3.1 x 108), two focus levels.
H. MOP403-17, (7.5 x 101.5).
I. MOP403-19, (3.1 x108.1).
J-K. MOP403-17, (5.6 x 103.5), holotype, two focus levels.
L. MOP403-18, (9.5 x 108.5).
M. MOP403-17, (8.3 x 92).
- Fig. P. *Micrhystridium* sp.
MOP403-12, (4.5 x 99).
- Figs.N-O. *Micrhystridium pisinum* sp. nov.
N. MOP403-17, (16.5 x 99), holotype.
O. 86Z237-2, (8 x 107.3).

The specimen D collected from the borehole Mt. Charlotte No.1 and others from Bluebush No.1.

The scale bar below F is 20 μ m for E-P, 25 μ m for B, 31 μ m for D, 50 μ m for C and 100 μ m for A.

Plate XLII

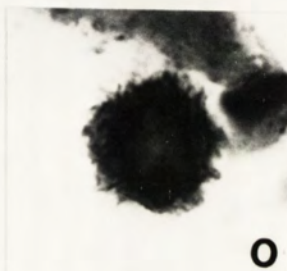
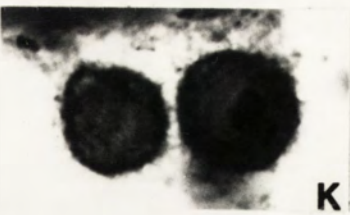
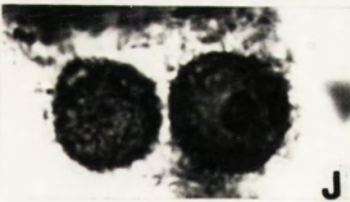
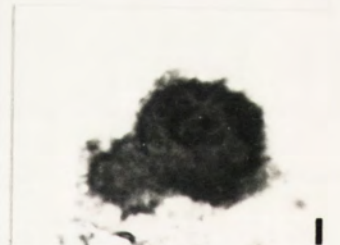
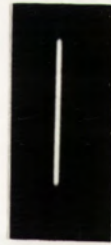
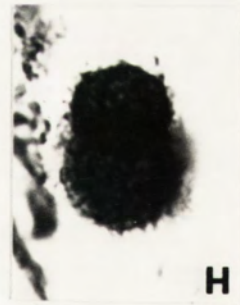
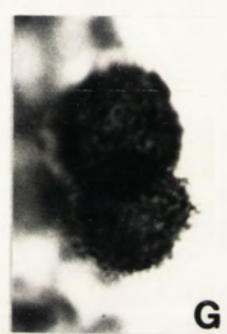
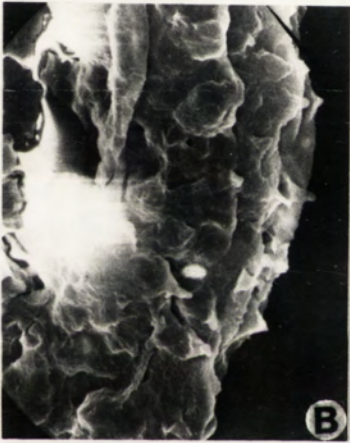
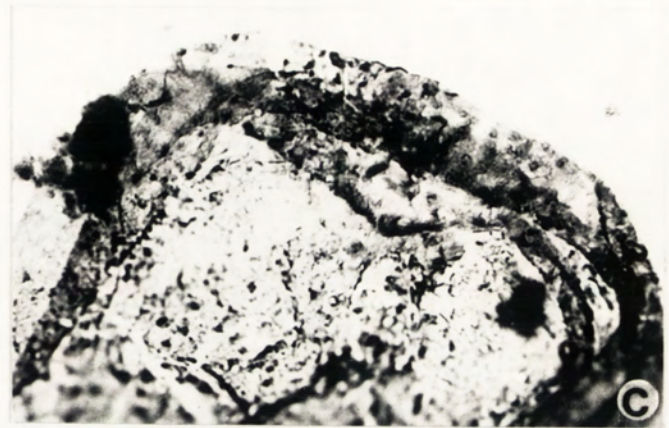
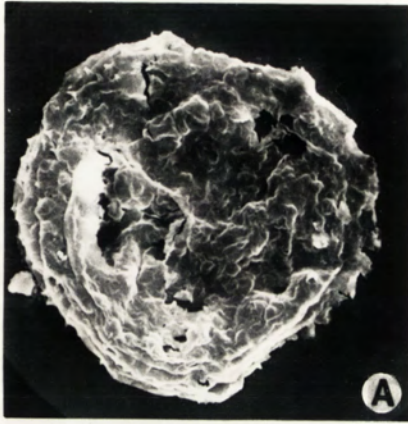


Plate XLIII

- Figs.A-H. *Dasysphaeridium walterii* gen. et sp. nov.
A. 86Z236. Scale bars are 10 μ m .
B. 86Z236. Scale bars are 10 μ m.
C. Holotype, 86Z237-3, (9 x 95).
D. 86Z236-3, (8.3 x 101).
E. 86Z236-3, (11 X 104).
F. 86Z237-1, (4.8 X 101).
G. 86Z236-1, (2.3 X 109.7).
H. 86Z236-3, (15.8 X 113).
- Figs.I-K. *Comasphaeridium pollostum* sp. nov.
I-J. MOP403-18, (11.5 X 107.3).
K. Holotype, MOP403-18, (18 X 101.3).
- Figs.L-P. *Skiagia pusilla* sp. nov.
L. MOP403-19, (12.5 X 109.5).
M. MOP403-19, (18.1 X 111).
N. MOP403-18, (5 X 95.5).
O. Holotype, MOP403-17, (5.8 X 98.5).
P. MOP403-17, (8.5 X 105.1).

All specimens collected from the borehole Bluebush No.1.

The scale bar below I is 20 μ m for all specimens.

Plate XLIII

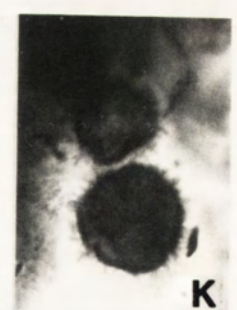
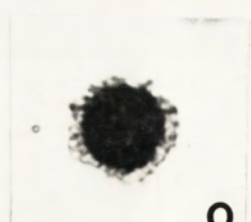
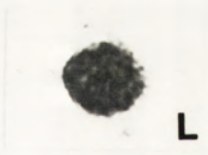
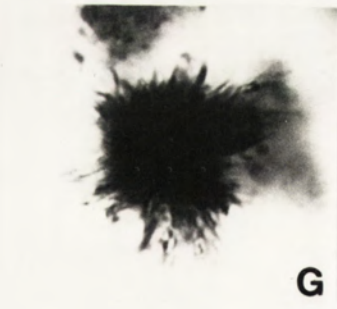
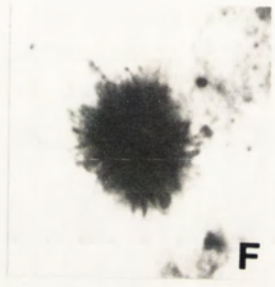
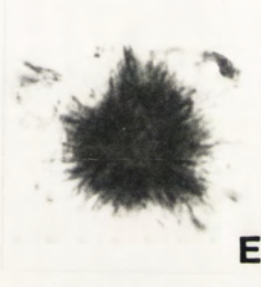
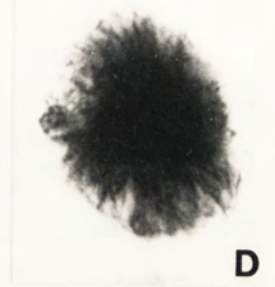
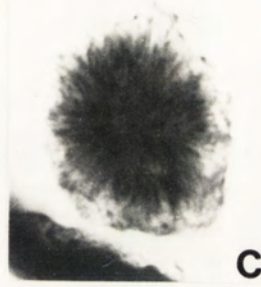
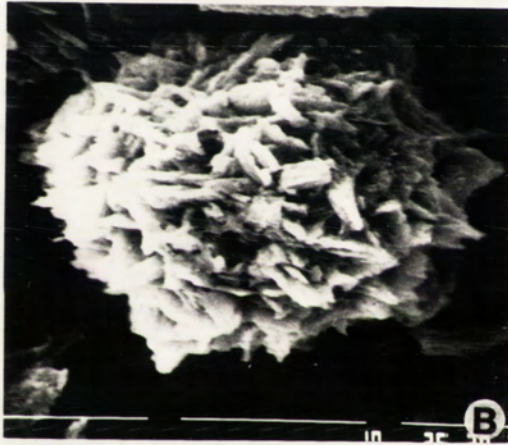
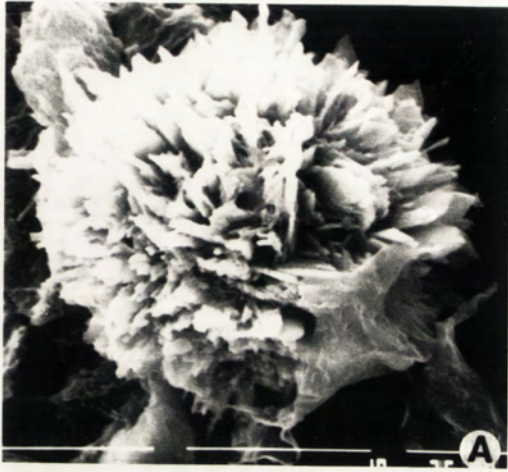


Plate XLIV

- Figs.A-I. *Dasysphaeridium trichotum* gen. et sp. nov.
A. 86Z236 . Scale bars are 10 μ m.
B. 86Z237-3, (3.1 X 106.8).
C. 86Z237-2, (6.1 X 112).
D. 86Z237-1, (9 X 113.5).
E. Holotype, 86Z236-1, (2 X 110).
F. 86Z237-1, (5.5 X 112.5).
G. 86Z236-3, (9.4 X 114.5).
H. 86Z236-1, (2.3 X 109.8).
I. 86Z236. Scale bars are 10 μ m.
- Fig.J. *Synsphaeridium* sp.
 MOP403-2 , (9 X 106).

All specimens collected from the borehole Bluebush No.1.

The scale bar below G is 40 μ m for B-H, and 63 μ m for J.

Plate XLIV

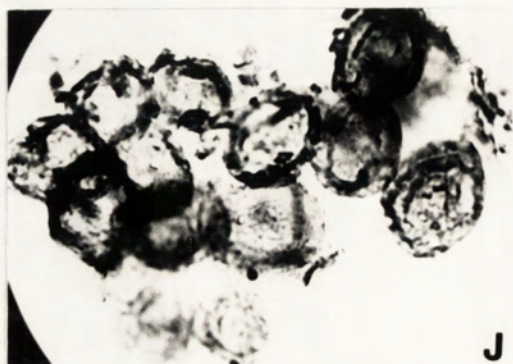
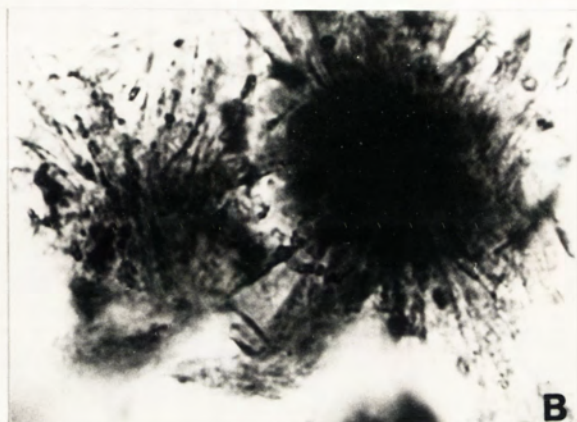
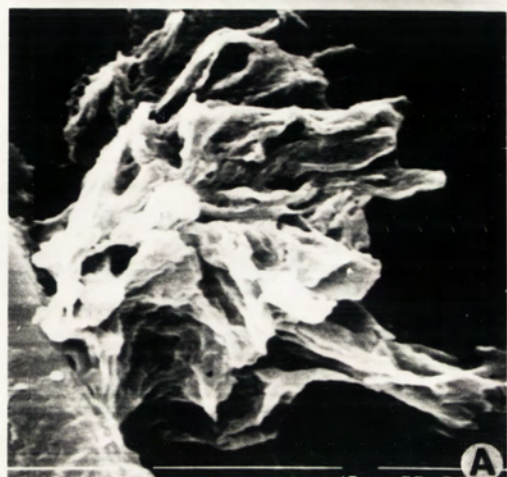


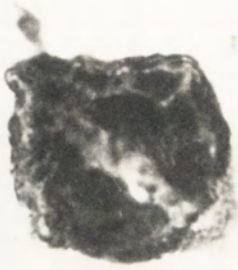
Plate XLV

- Figs.A-F. *Octoedryxium atroquadrum* sp. nov.
A. 86Z043-1, (4.2 X 109).
B-C. 86Z043-2, (15.3 X 107.2).
D. 86Z043-1, (18.5 X 110).
E. 86Z043-1, (19.5 X 101.8), holotype.
F. 86Z043-2, (8 X 104.7).
- Fig. G. *Tasmanites* sp.
86Z236.
- Fig.H. *Malanocyrrillium* sp. A.
86Z043-2, (15 X 103.6).
- Figs.I-J. *Sinianella scabrata* sp. nov.
I. MOP403-2, (9.5 X 103.5).
J. MOP403-2, (16.7 X 114.5).
- Fig.K. *Sinianella uniplicata* (Yin) emend.
MOP403-6, (18 X 106.7).
- Fig.L. *Sinianella* sp.
MOP403-11, (3.4 X 103.5).

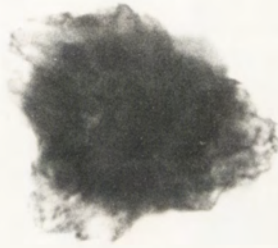
The specimens A-F, H collected from the borehole Mt. Charlotte No.1 and others from Bluebush No.1.

The scale bar below E is 20 μ m for A-F, H, K; 31 μ m for I, J, L and 40 μ m for G.

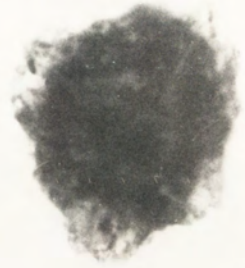
Plate XLV



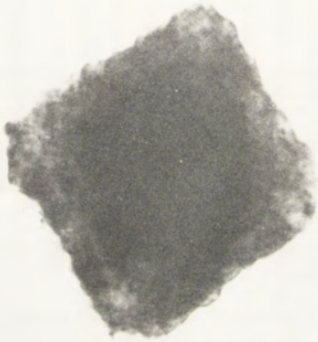
A



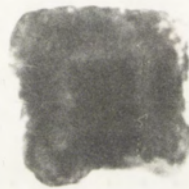
B



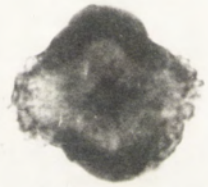
C



D



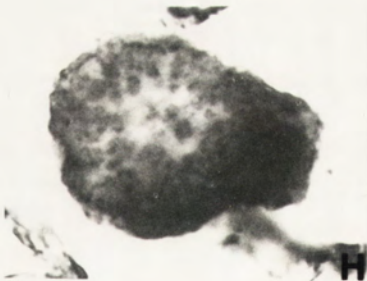
E



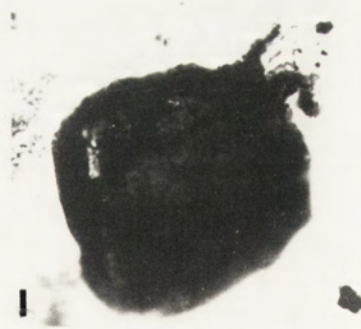
F



G



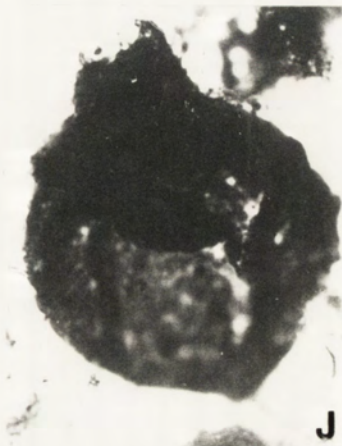
H



I



K



J



L

Plate XLVI

- Figs.A-E *Pterospermopsimorpha spongia* sp. nov.
A. 86Z236. Scale bars are 10 μ m.
B. 86Z236-3, (23.3 X 109).
C. 86Z043-1, (6 X 111).
D. 86Z043-1, (13.5 X 116.5).
E. 86Z043-1, (16.5 X 116.5).
- Figs.F-G. *Alliumella baltica* Vanderflit, 1971
F. 86Z236. Scale bars are 10 μ m.
G. MOP403-17, (14 X 104.1).
- Fig.H *Alliumella* sp.
86Z236. Scale bars are 10 μ m.
- Figs.I-J. *Pterospermopsimorpha* sp.
I. MOP403-10, (17.8 X 107.8).
J. MOP403-15, (18.5 X 103.5).
- Fig.K. *Pterospermopsimorpha binata* Timofeev, 1966
MOP403-17, (15 X 101).
- Fig.L. *Teohipolia* sp.
MOP403-4, (12.8 X 107.1).

The specimens C-E collected from the borehole Mt. Charlotte No.1 and others from Bluebush No.1.

The scale bars below A are 10 μ m for B-E, L; 16 μ m for G, I, J and 20 μ m for K.

Plate XLVI

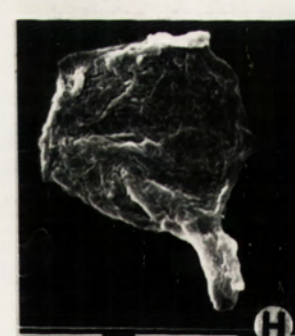
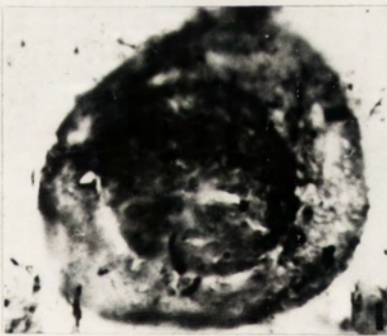
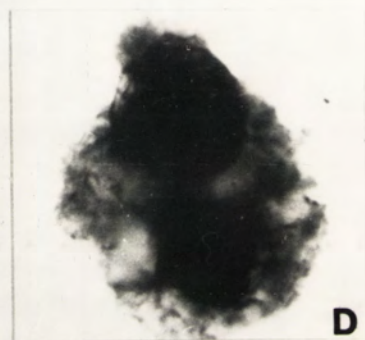
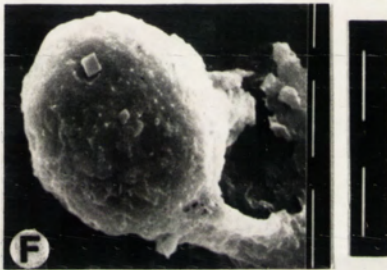
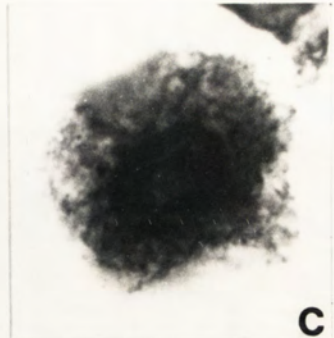
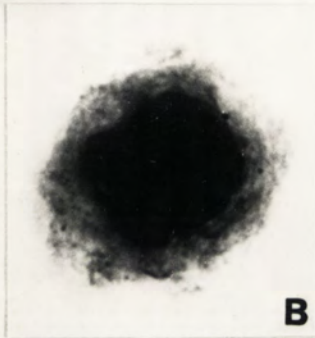
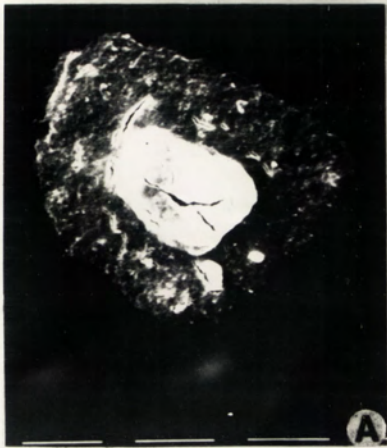


Plate XLVII

- Figs.A-E. *Protoleiosphaeridium densum* (Timofeev, 1966) comb.
A. 86Z237. Scale Bars are 10um.
B. 86Z237-1, (8.2 x 107.5).
C. MOP404-2, (3 X 95.1).
D. 86Z237-3, (6.7 X 102.5).
E. 86Z237-1, (19.8 X 107).
- Figs.F-G. *Stictosphaeridium* sp.
F. MOP403-9, (13.8 X 117).
G. MOP403-19, (18 X 94).
- Fig.H. *Protoleiosphaeridium papyraceum* (Timofeev, 1966) comb.
MOP403-9, (15.5 x 97.5).
- Figs.I-J. *Protoleisphaeridium flexuosum* (Timofeev, 1966) comb.
I. MOP404. Scale bars are 10um.
J. 86Z237-1, (5.5 x 104).

All specimens are collected from the borehole Bluebush No.1.

The scale bar below D is 40um for B, D, E, G, H, J and 63um for C, F.

Plate XLVII

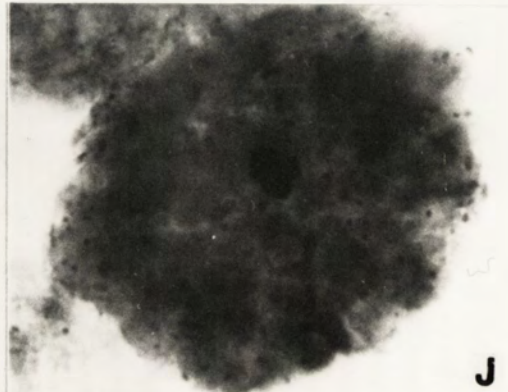
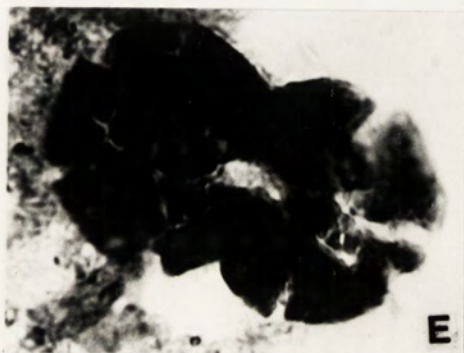
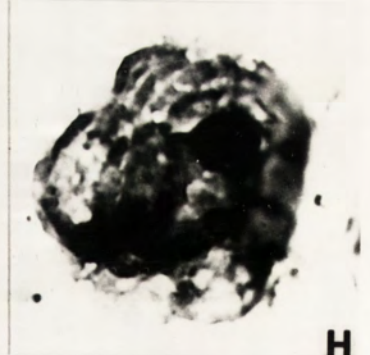
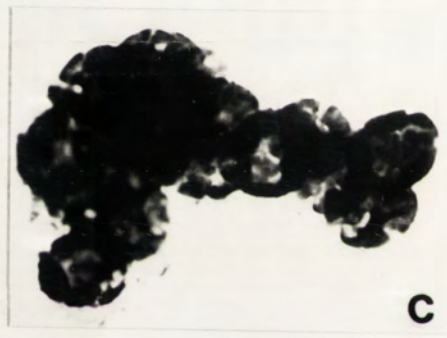
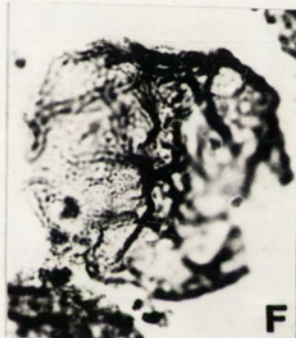
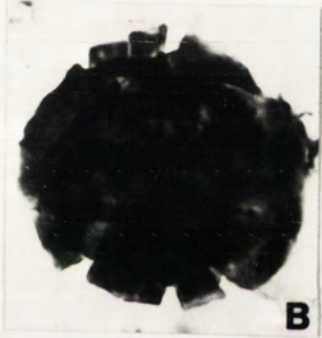
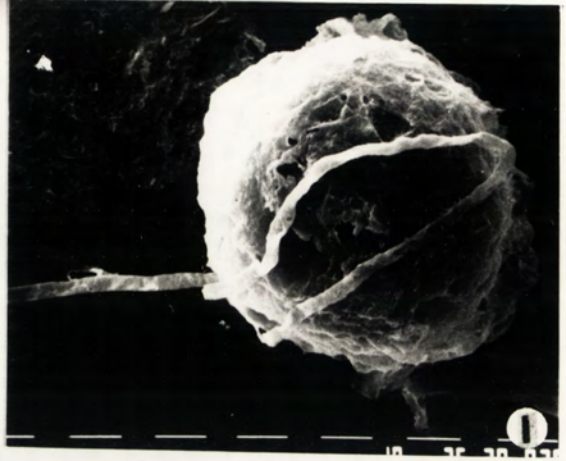
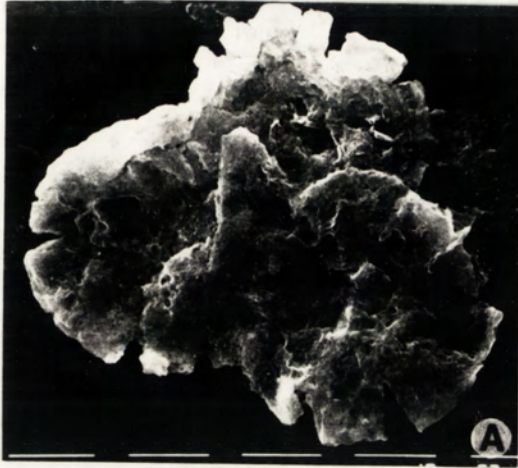


Plate XLVIII

- Figs.A-D. *Leiomarginata ? simplex* Naumov, 1960
A. MOP403-3, (17 X 102).
B. MOP403-11, (18.5 X 108).
C. MOP403-12, (18 X 103).
D. 86Z236-2, (16.3 X 101.5).

- Figs.E-P. *Leiomarginata ? twamaceria* sp. nov.
E. MOP403-18, (12 X 111).
F. 86Z043-2, (10.5 X 111).
G. 86Z043-1, (5.7 X 99.6).
H. Holotype. 86Z043-1, (3 x 103).
I. 86Z043-2, (7 x 102.8).
J-K. MOP403-18, (18.5 x 100).
L. 86Z237-2, (14.6 x 101).
M. 86Z237-2, (11 x 108.3).
N. 86Z043-1, (17.5 x 116.2).
O. 86Z043-1, (15.3 x 103).
P. MOP403-19, (16 x 111).

The specimens F-I; N-O collected from the borehole Mt. Charlotte No.1, and others from Bluebush No.1.

The scale bars below J are 20 μ m for all specimens.

Plate XLVIII

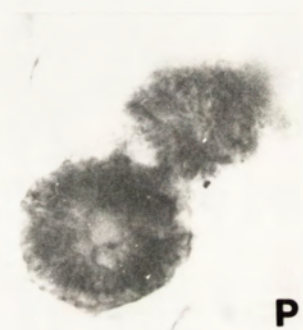
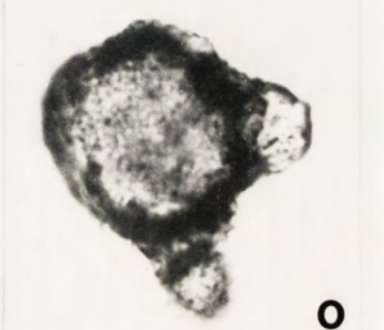
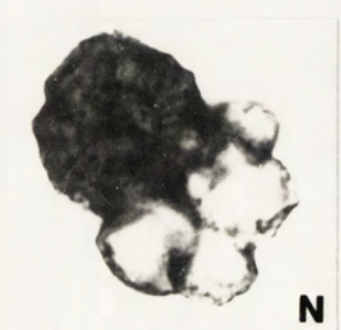
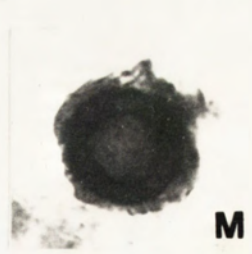
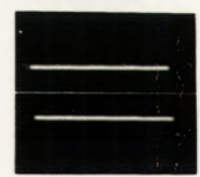
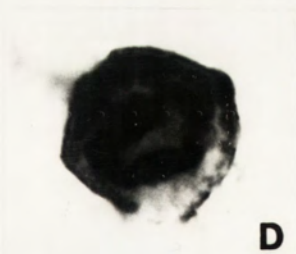
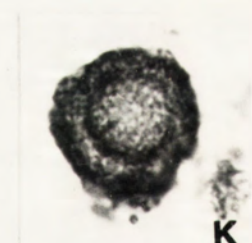
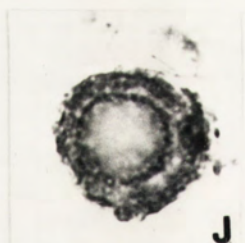
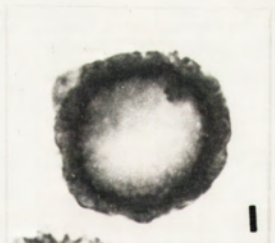
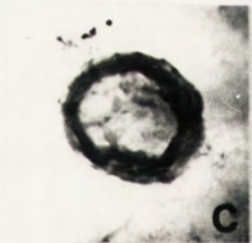
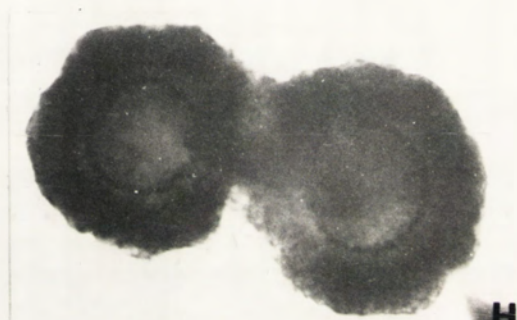
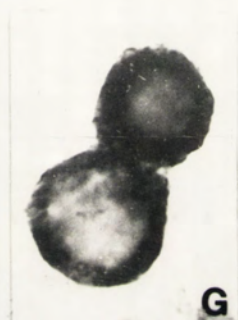
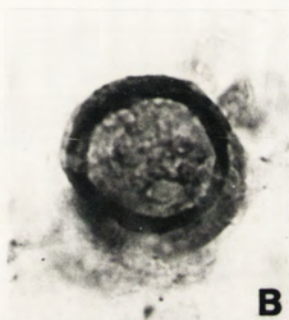
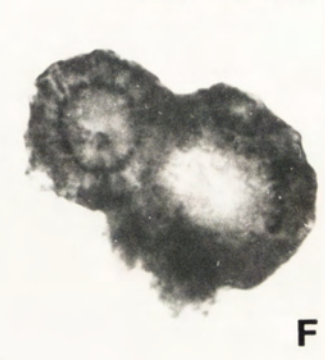
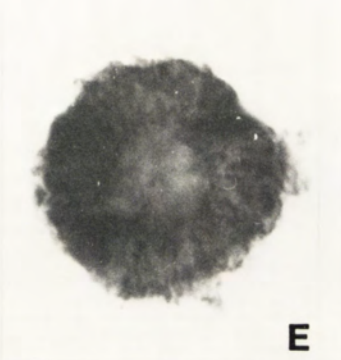
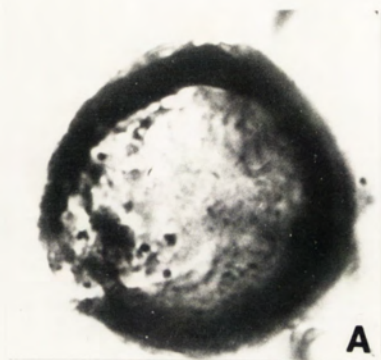


Plate II

- Figs. A-E. *Leiosphaeridia asperata* (Naumova) Lindgren, 1982
A. MOP403-16, (9.7 X 107.1).
B. MOP403-8, (16.5 X 99).
C. MOP403-3, (13.8 X 101.6).
D. 86Z236.
E. MOP403-17, (11 X 100).

- Figs. F-H. *Kildinosphaera chagrinata* Vidal, 1983
F. MOP403-6, (9 X 112).
G. MOP403-13, (19 X 100).
H. MOP403-19, (19.3 X 108).

All specimens are collected from the borehole Bluebush No.1.

The scale bars below E are 40 μ m for H; 63 μ m for A-F and 200 μ m for G.

Plate II

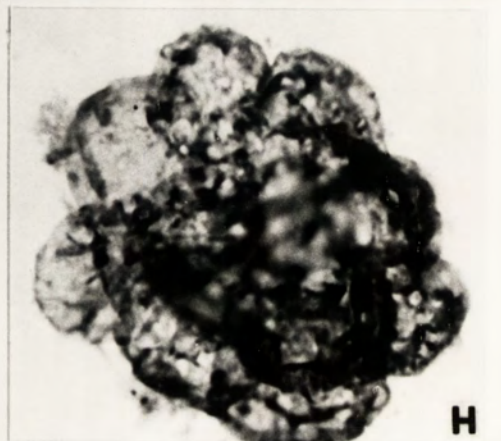
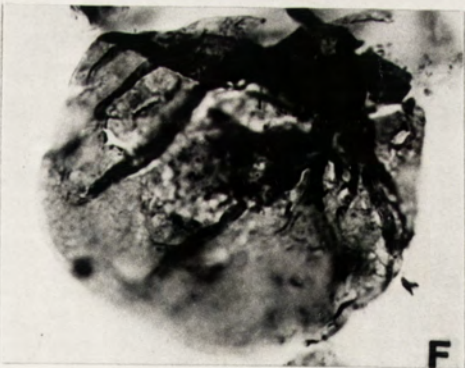
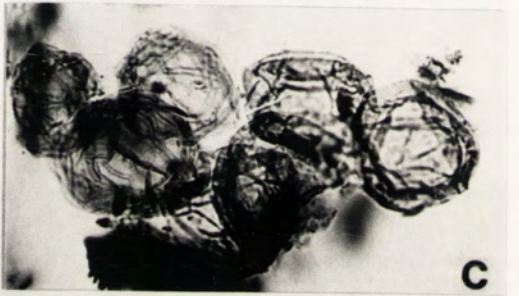
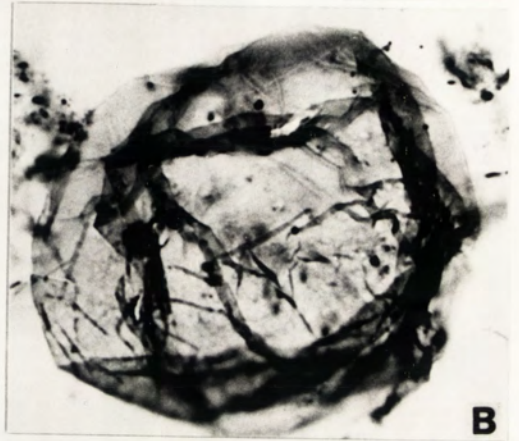


Plate L

- Figs.A-C. *Kildinosphaera granulata* Vidal 1983
A. 86Z237-1, (8.2 x 102).
B. MOP403-11, (8 x 100).
C. 86Z043-1, (3.7 x 106.7).
- Figs.D, I. *Trachysphaeridium* sp.
D. 86Z043-1, (10.8 x 112).
I. 86Z236-5, (4.5 x 99.5).
- Fig.E. *Trachysphaeridium levis* (Lopukhin) Vidal, 1974
86Z237-1, (16x107.2).
- Figs.F-G. *Protoleiosphaeridium* sp.
86Z237. Note the wall meshwork structure. The scale bars in
F are 10 μ m and in G are 1 μ m.
- Fig. H. *Synsphaeridium* sp.
MOP403-15, (8.6x101) .

Specimens C and D collected from the borehole Mt. Winter No.1 and others from Bluebush No.1.

The scale bar below G is 20 μ m for D ; 31 μ m for E, I; 40 μ m for B, H and 50 μ m for A, C.

Plate L

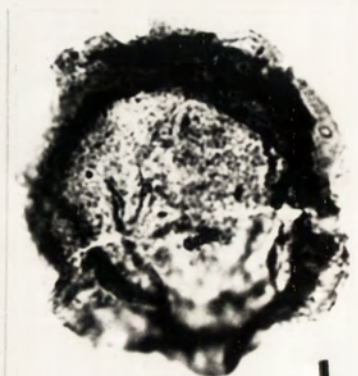
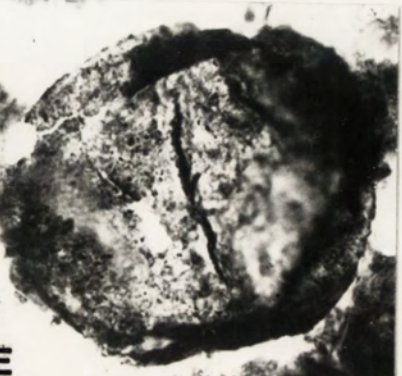
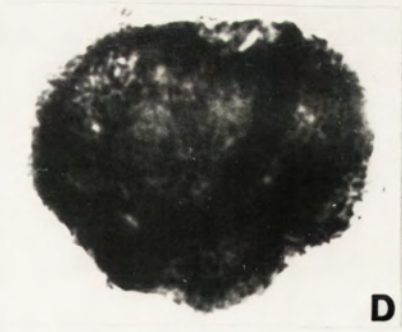
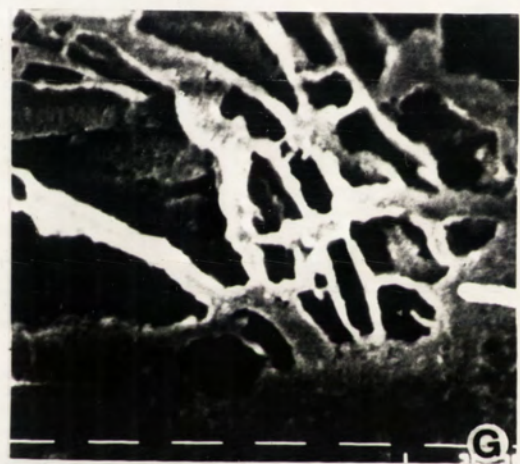
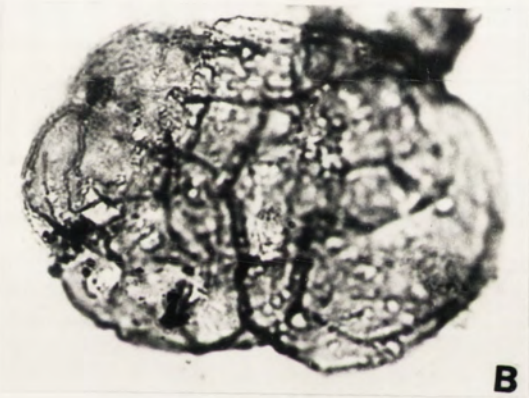
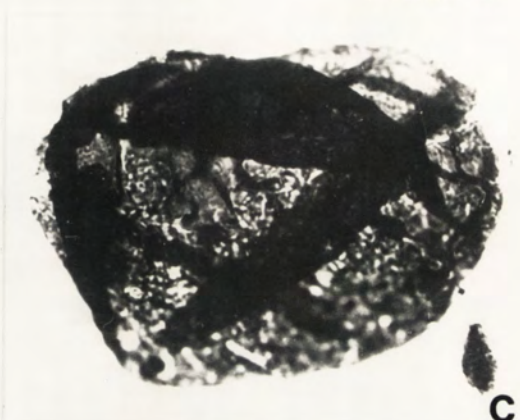
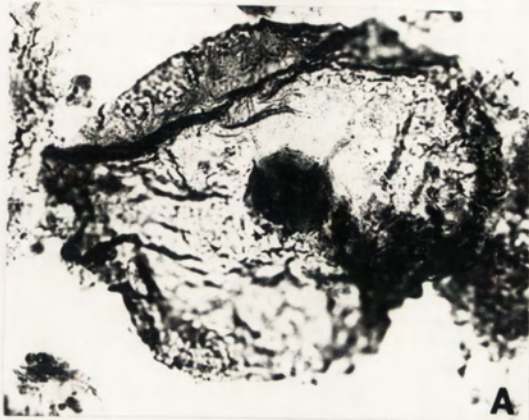


Plate LI

- Figs.A-C. Unnamed specimen A.
MOP403-18, (9.8 X 97.2), three focus levels.
- figs.D-E. *Myxococcoides minor* Schopf, 1968
MOP403-18, (12.5 X 100.5).
- Figs.F-H. *Palaeoanacystis compacta* sp. nov.
F. Holotype. MOP403-3, (11.5 X 101.6).
G. MOP403-14, (9 X 115.3).
H. MOP403-8, (13.5 X 103.1).
- Figs.I-J. *Gloeodiniopsis lamellosa* (Schopf) Knoll et Golubic, 1979
MOP403-2, (8.9 X 100).

All specimens collected from the borehold Bluebush No.1.

The scale bar below E is 40 μ m for A-E, I, J; 63 μ m for F; 80 μ m for H and 100 μ m for G.

Plate LI

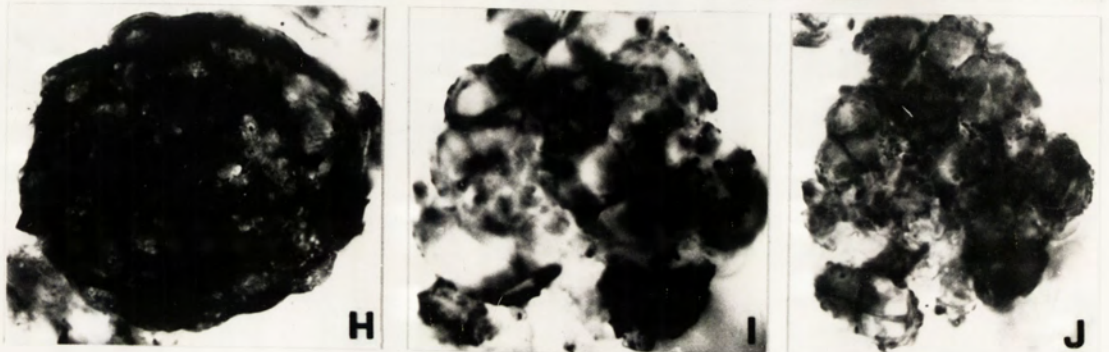
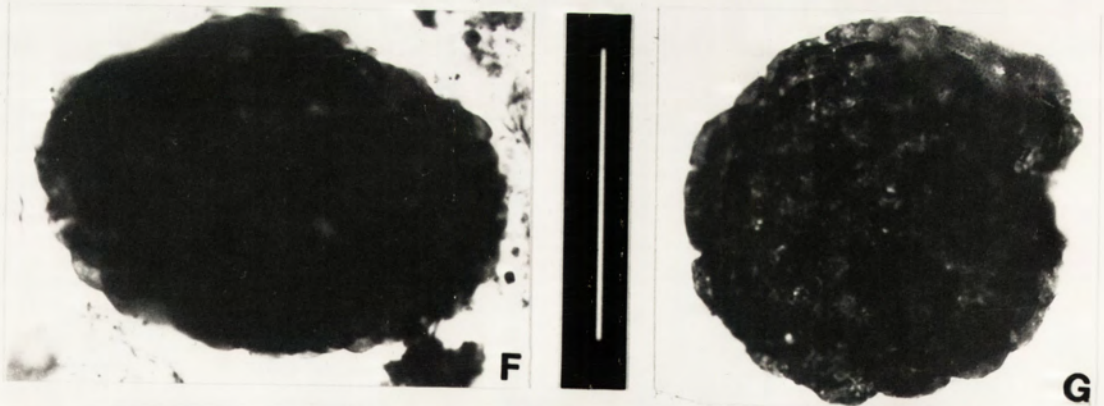
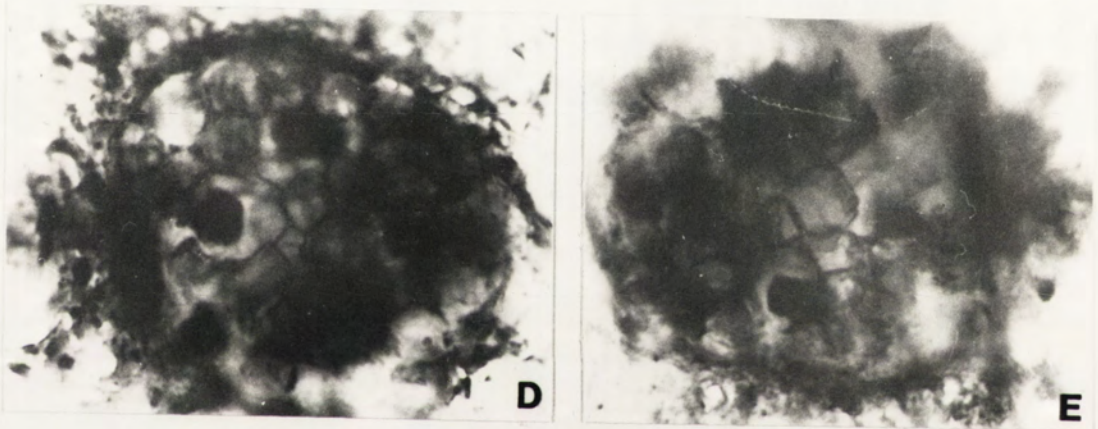
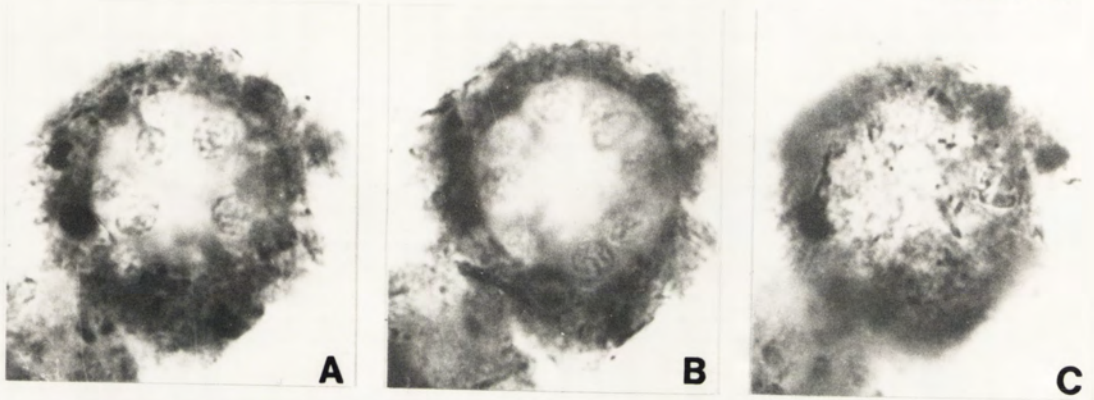


Plate LII

Figs.A-H. *Myxococcoides multiplicis* sp. nov

- A-B. MOP403-17, (5.5 X 95), holotype.
- C. MOP404-2, (8.5 X 104.6).
- D. MOP403-17, (11.7 X 113.5).
- E. MOP404-2, (5.6 X 100.3).
- F-G. MOP403-17, (16 X 111.8).
- H. MOP403-20, (13.3 X 111.2).

All specimens collected from the borehole Bluebush No.1.

The scale bar below B is 40 μ m for B, G; 80 μ m for D, H; and 100 μ m for A, C, E, F.

Plate LII

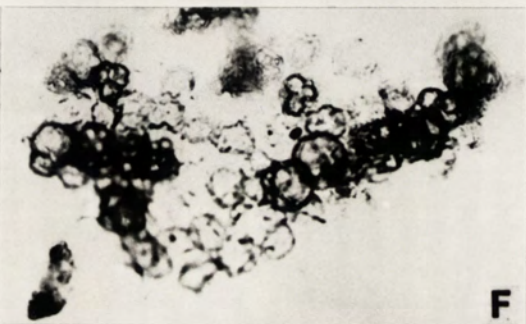
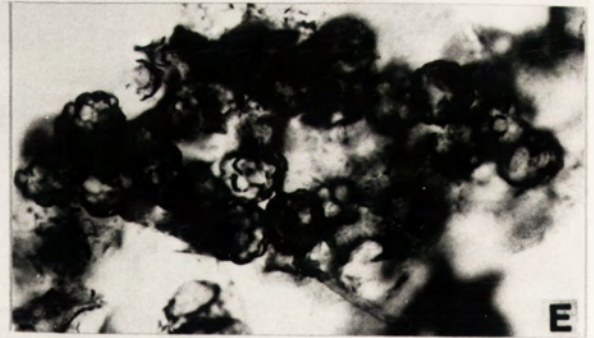
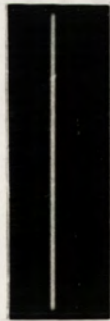
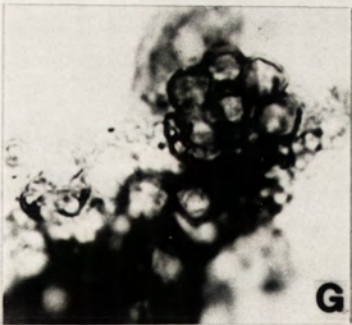
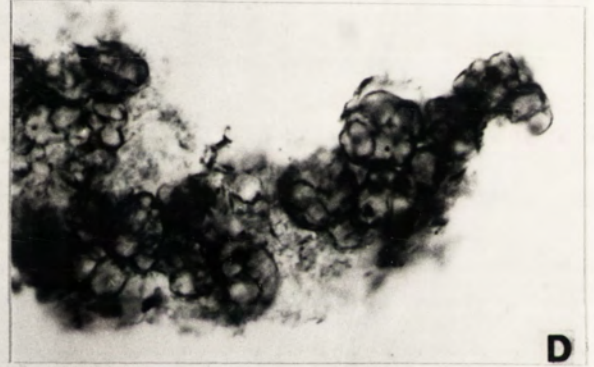
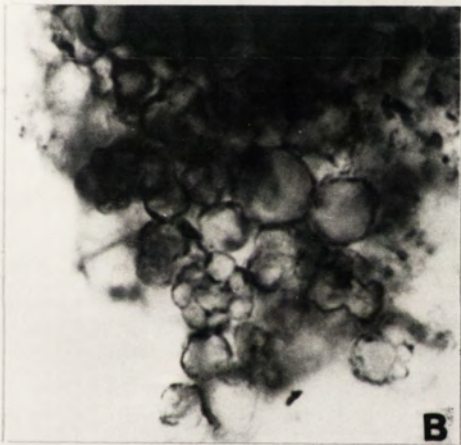
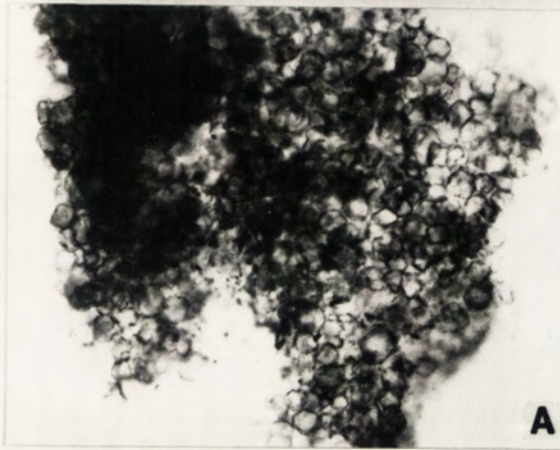


Plate LIII

- Figs. A-G. *Sphaerophycus sphairum* sp. nov.
A. MOP403-15, (11 X 106.5), holotype.
B-C. Part of A.
D. 86Z043-1, (4.5 X 99).
E. MOP403-2, (7.1 X 103.5).
F. MOP403-6, (17.5 X 110).
G. MOP404-2, (18.5 X 103).

Figs.H. *Kildinosphaera* sp.
MOP403-14, (6.5 X 109.5).

Fig.I. *Siphonophycus* sp. and *E. robusta*
MOP403, Scale bar is 10 μ m.

- Figs.J-K. *Myxosoccoides* sp.
J. MOP403-11, (14.5 X 107).
K. MOP403-11, (5.1 X 99.5).

The specimen D collected from the borehole Mt. Charlotte No.1 and all others from Bluebush No.1.

The scale bar below G is 20 μ m for B-G; 40 μ m for A; 50 μ m for J; 80 μ m for H and 100 μ m for K.

Plate LIII

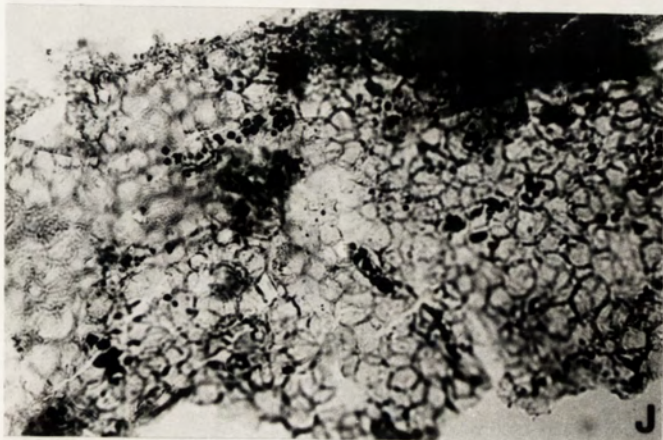
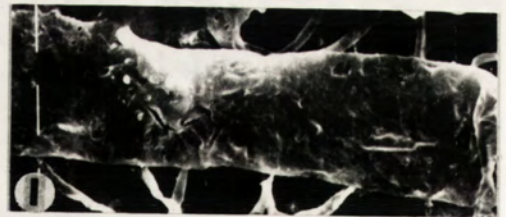
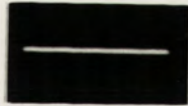
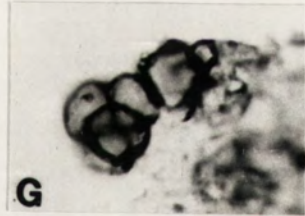
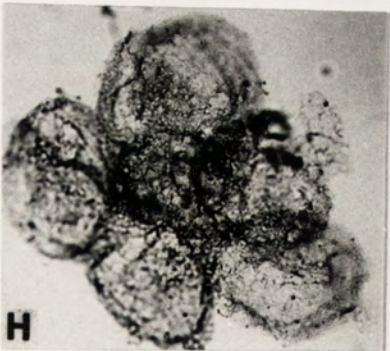
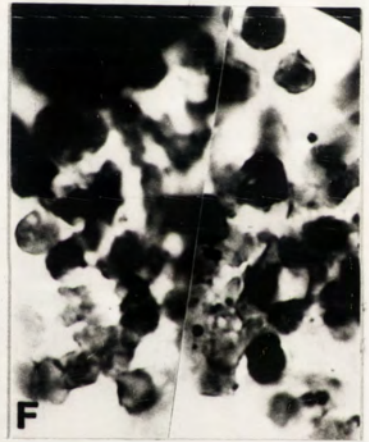
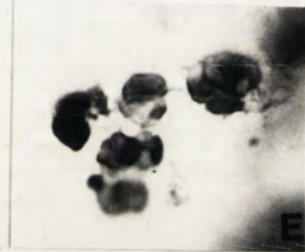
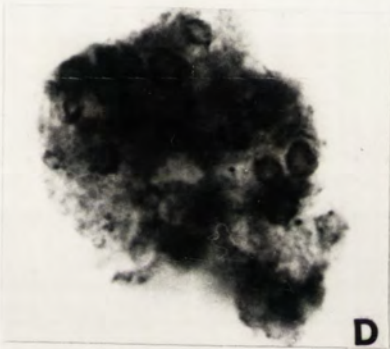


Plate LIV

Figs. A-H. *Pyritosphaera barbaria* Love, 1957

- A. 86Z236. Scale bars are 10 μ m.
- B. MOP404-2, (10 X 104.5).
- C. 86Z236. Scale bars are 10 μ m.
- D. 86Z236. Scale bars are 10 μ m.
- E. MOP404-1, (15.5 X 107.5).
- F. MOP403-19, (14.1 X 109.2).
- G. MOP404-2, (5 X 112).
- H. MOP404-1, (2.7 X 118.7).

Figs. I-J. *Glenobotrydion* sp.

- I. MOP403-2, (14.9 X 107.5).
- J. MOP403-2, (21.5 X 111.2).

Fig. K. *Myxococcoides multiplicis* sp. nov.
MOP403-17, (14 X 97.3).

All specimens collected from the borehole Bluebush No.1.

The scale bars below D are 20 μ m for B, E, F, H; 31 μ m for I, K and 40 μ m for G, J.

Plate LIV

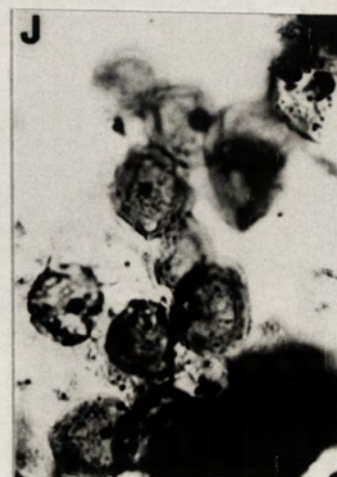
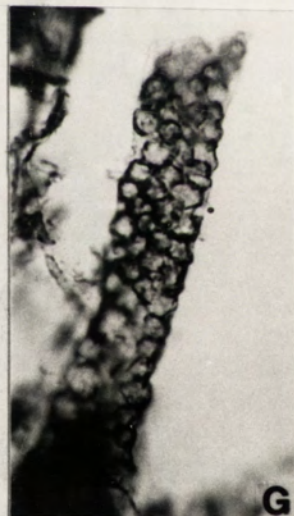
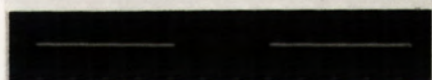
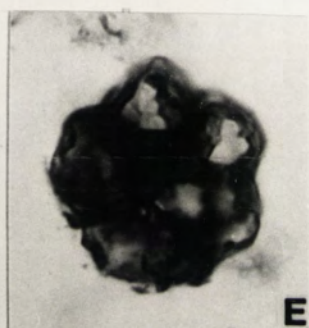
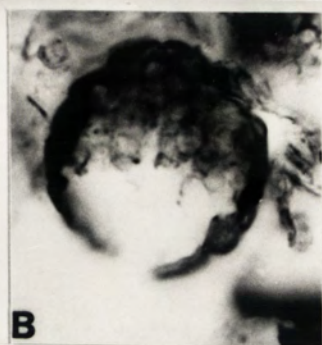


Plate LV

- Figs. A-H. *Quaestiosignum filum* gen. et sp. nov.
A-B. 86Z236 Scale bars are 10 μ m.
C. Holotype, 86Z236-5, (21 x 117.5).
D. 86Z236-5, (10 x 114).
E. 86Z236-5, (14 X 120).
F. MOP403-14, (12.5 X 107.7).
G. MOP403-6, (10 X 107).
H. MOP403-12, (14.5 X 104.5).
- Fig.I. *Eomycetopsis robusta* (Schopf) Knoll et Golubic, 1979
MOP403-2, (16.7 X 103.8).
- Fig.J. *Archaeotrichion contortum* Schopf, 1968
MOP403-11, (11 x 108).

All specimens collected from the borehole Bluebush No.1.

The scale bar below E is 20 μ m for C, D, E, I; 31 μ m for G; 40 μ m for H;
50 μ m for F and 80 μ m for J.

Plate LV

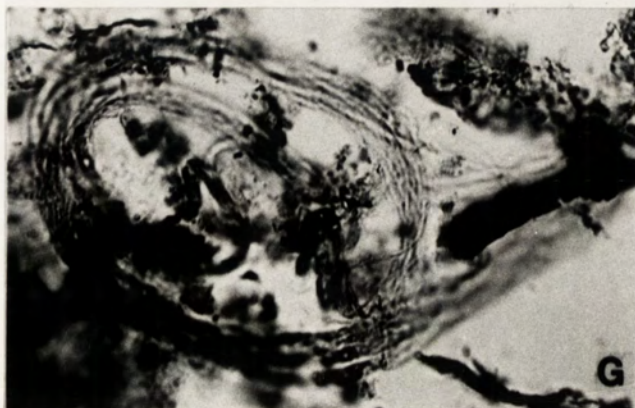
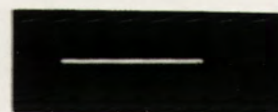
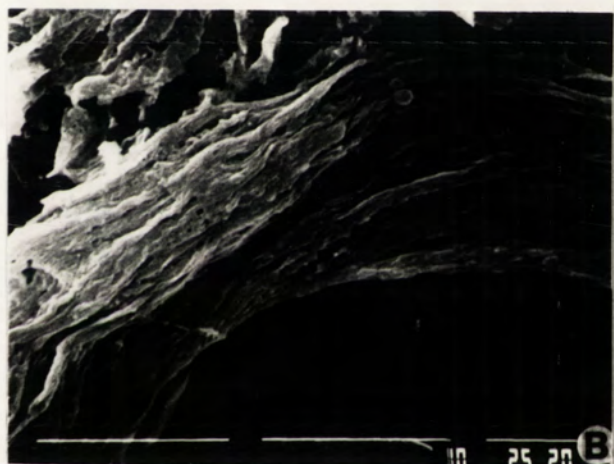
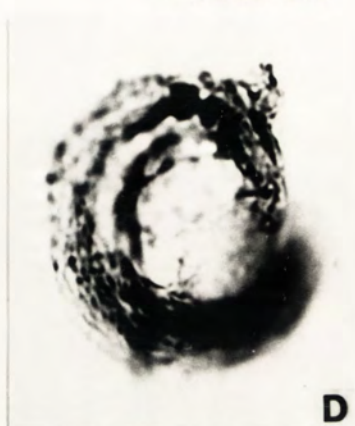


Plate LVI

- Figs.A-F. *Heliconema fidicularis* sp. nov.
A. MOP403. Scale bars are 10 μ m.
B-C. MOP403-10, (9.2 x 107.7) .
D. MOP403-4, (17 X 106.2), holotype.
E. MOP403-6, (9 X 106.2).
F. MOP404-1, (7 X 108.1) .

- Figs.G-J. *Oscillatoriopsis* sp.
G. MOP403-12, (18.1 X 105).
H. MOP403-12, (8.5 X 102).
I. MOP403-14, (9.8 X 103) .
J. MOP403-15, (12.5 X 99.5).

- Fig.K. *Obruchevela* sp. A
MOP403-12, (11.5 X 113).

All specimens collected from the borehole Bluebush No.1.

The scale bars below G are 31 μ m for B, C, E, G, I; 20 μ m for K;
40 μ m for D; 50 μ m for F, H and 80 μ m for J.

Plate LVI

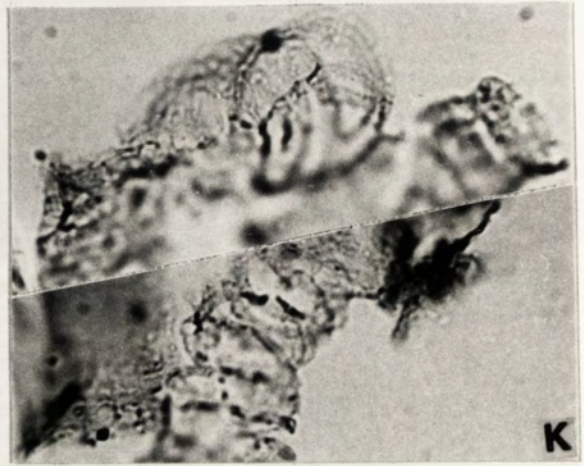
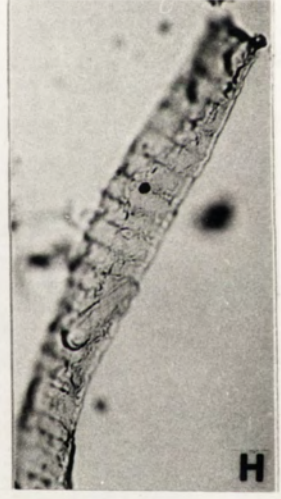
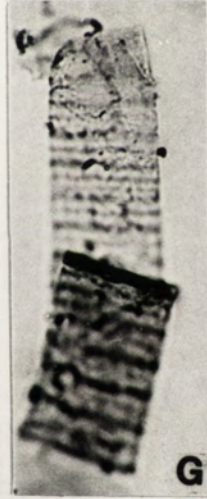
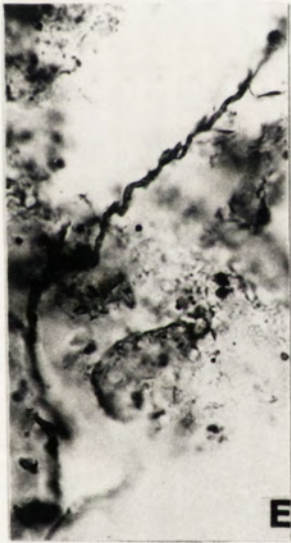
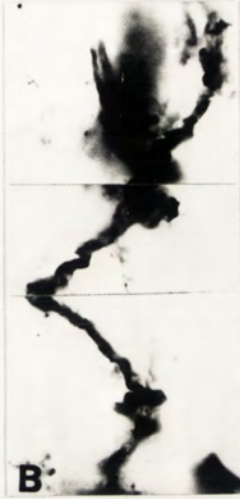


Plate LVII

Fig.A. *Siphonophycus* sp A and *Eomycetopsis robusta* (Schopf)
MOP404. Scale bar is 100 μ m.

Figs.B-E. *Eomycetopsis robusta* (Schopf) Knoll et Golubic, 1979

B. MOP403-11, (8 X 104.8).

C. MOP403-19, (6 X 112).

D. MOP403-20, (13.1 X 102).

E. MOP403-16, (8.5 X 108).

Fig.F. *Archaeotrichion contortum* Schopf, 1968
MOP403-11, (11 X 108).

Fig.G. *Siphonophycus kestron* Schopf, 1968
MOP403-6, (4.7 X 110.2).

Fig.H. *Siphonophycus* sp. A.
MOP403-5, (12.1 X 107).

All specimens collected from the borehole Bluebush No.1.

The scale bars in H are 16 μ m for E; 20 μ m for C, G; 25 μ m for B, D and
50 μ m for F, H.

Plate LVII

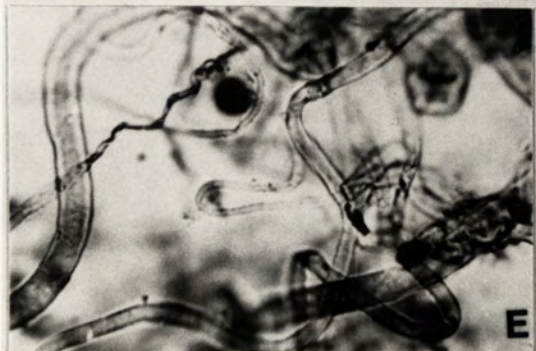
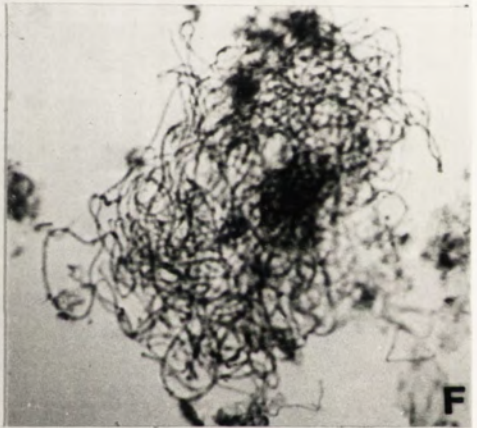
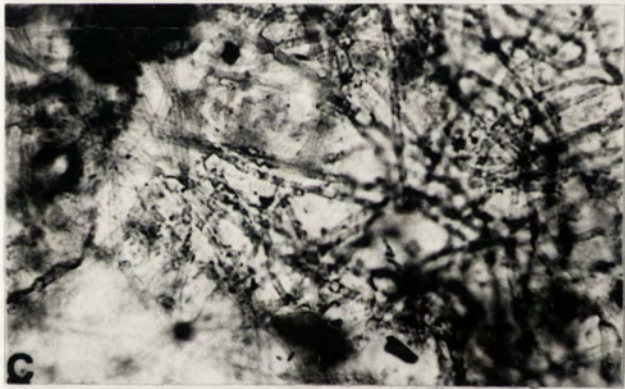
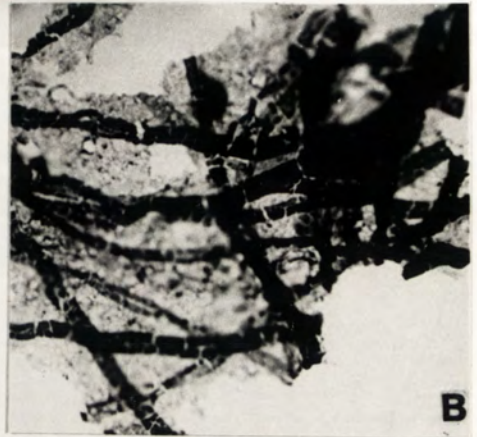
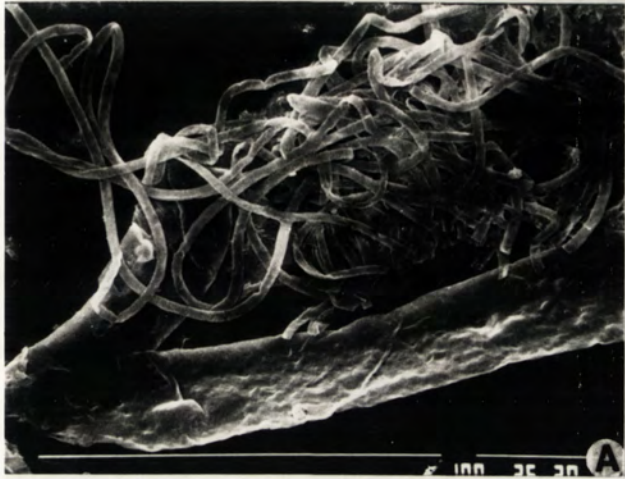


Plate LVIII

Figs.A-G *Alicesphaeridium medusoidum* gen. et sp. nov.

- A-B. Holotype. 87ZW17-5, (17 X 107.5).
- B. displaying granular surface.
- C. overturn. 87ZW17-1, (13.6 x 107.3).
- D. lateral view. 87ZW17-1, (9.5 x 118).
- E. lateral view. 87ZW17, Bars are 100 μ m.
- F. 87ZW17. Bars are 100 μ m.
- G. note variable processes. 87ZW17-2, (10.7 x 102.1).

All specimens collected from the borehole Rodinga No.4.

The scale bars below C is 22 μ m for B and 90 μ m for A,C, D, G.

Plate LVIII

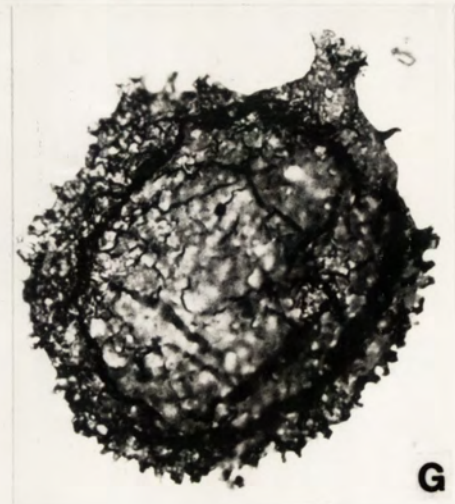
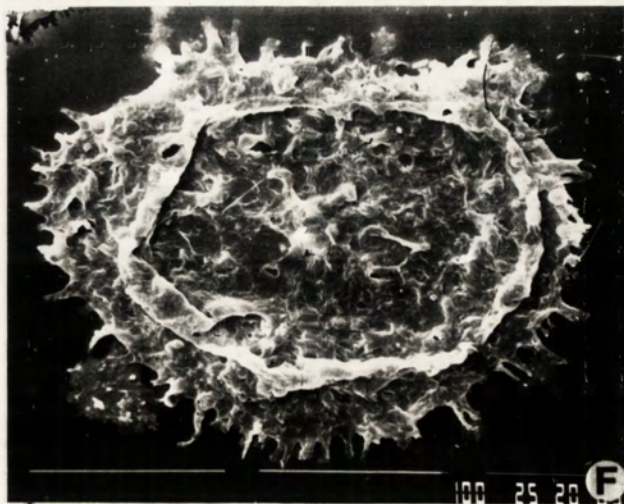
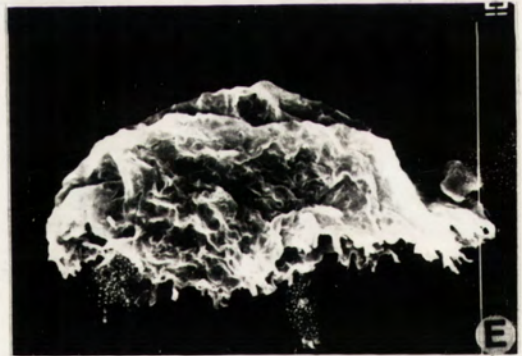
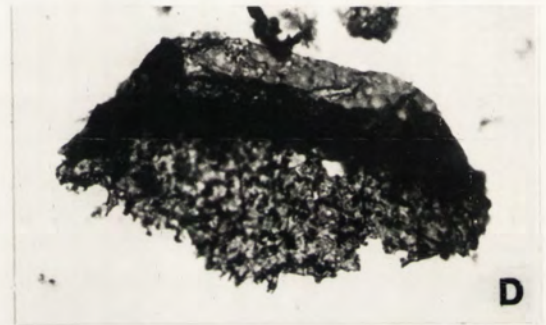
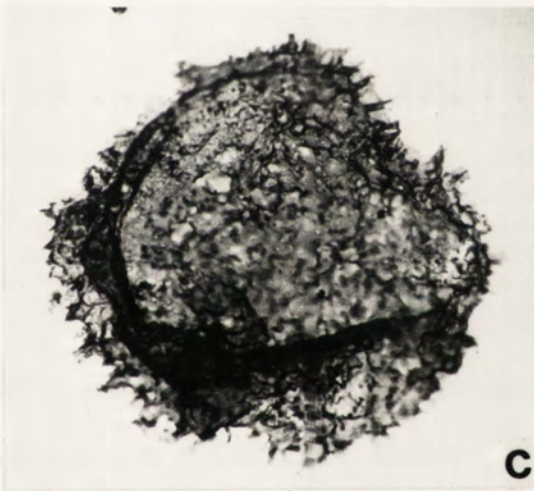
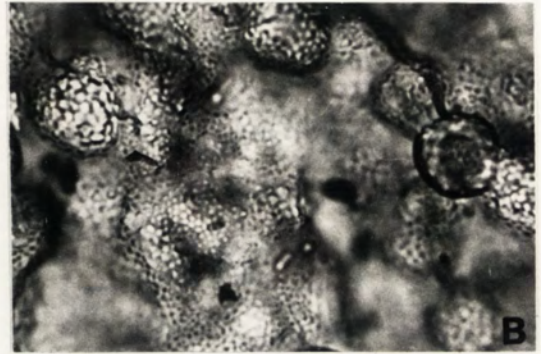
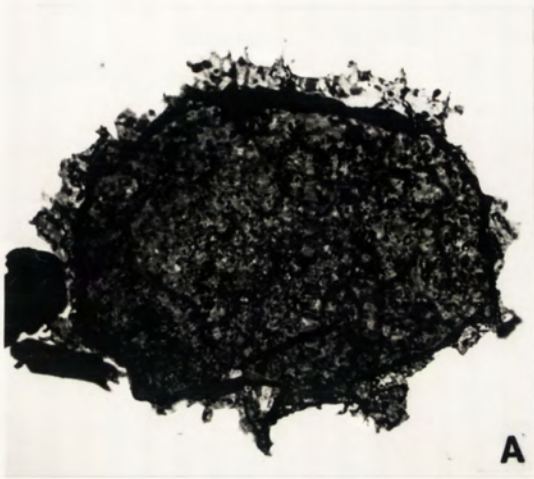


Plate LIX

Figs.A-G. *Alicesphaeridium medusoidum* gen. et sp. nov.

- A. lateral view. 87ZW17.
- B. 87ZW17-1, (6.5 x 114.5).
- C. lateral view . 87ZW17-1, (4.5 x 111.7).
- D. 87ZW17.
- E. lateral view. 87ZW17.
- F. twin specimens. 87ZW20-1, (14.5 x 115).
- G. note different processes. 87ZW16-1, (6.3 x 107.5).

Fig.H. *Alicesphaeridium* sp.
87ZW10.

All specimens collected from the borehole Rodinga No.4.

The scale bars in A, D, E, H are 100 μ m . The scale bar below A is 180 μ m for B, C, F, G.

Plate LIX

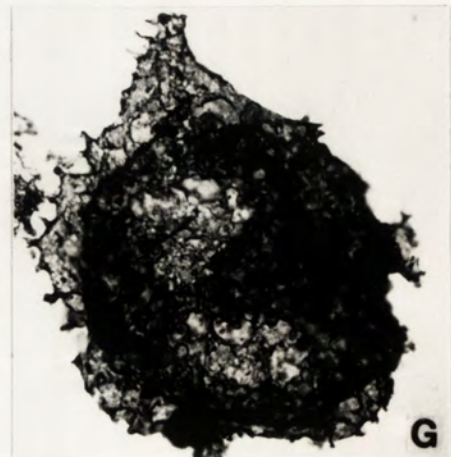
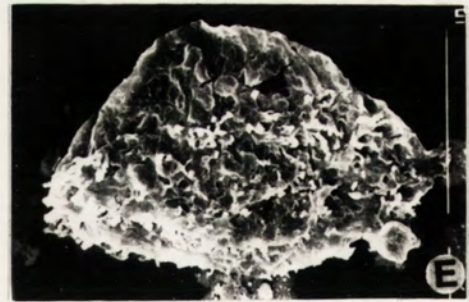
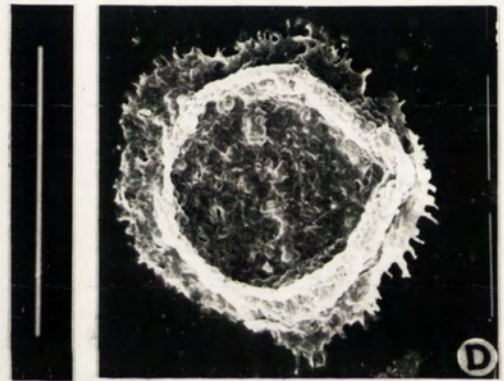
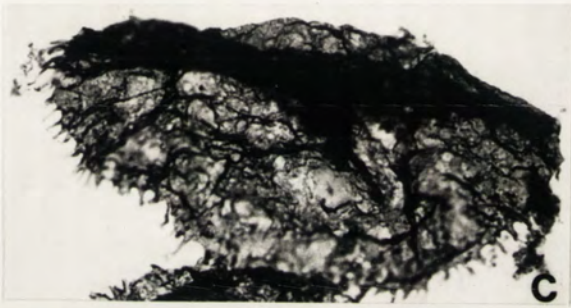
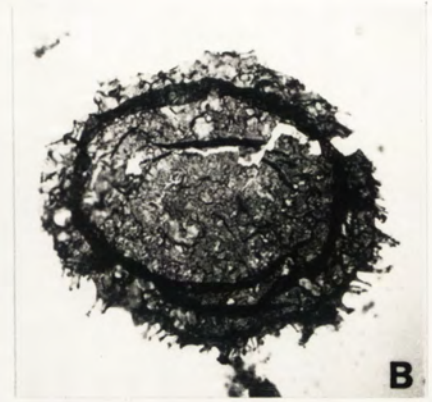


Plate LX

Figs.A-F. *Alicesphaeridium medusoidum* gen. et sp. nov.

- A. 87ZW17.
- B. overturn view . 87ZW18-2, (17 x 96.7).
- C. 87ZW18.
- D. overturn view. 87ZW18.
- E. 87ZW11.
- F. 87ZW18.

All specimens collected from the borehole Rodinga No.4.

The scale bars in A, C, D, E, F are 100 μ m. The scale bar below B is 180 μ m for B.

Plate LX

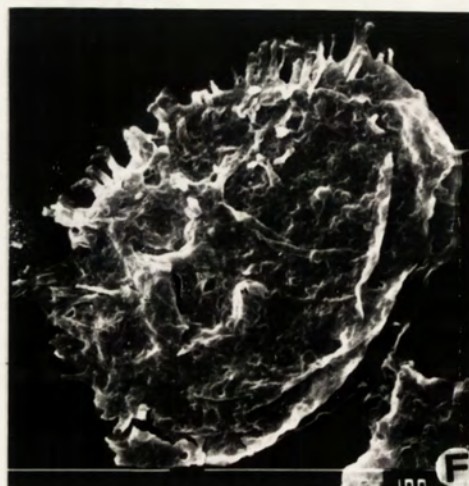
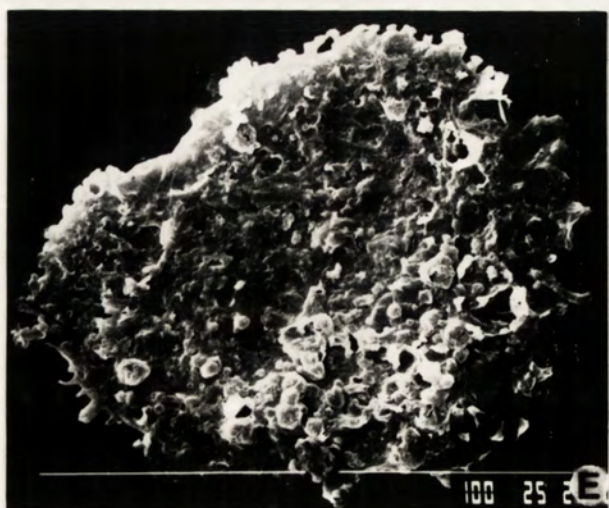
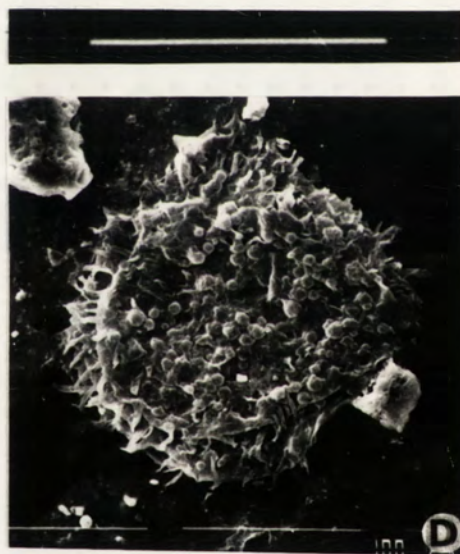
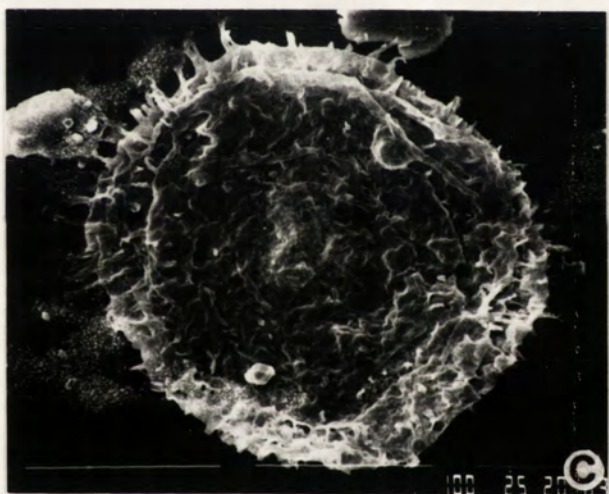
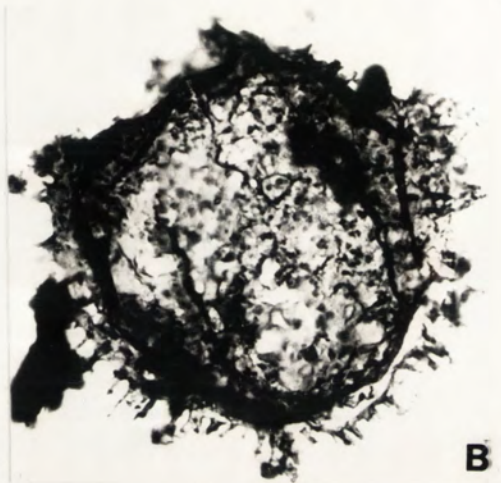
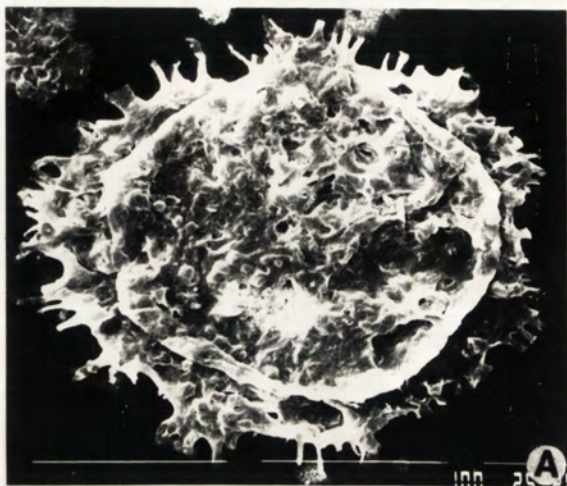


Plate LXI

Figs.A-G. *Multifronsphaeridium pelorium* sp. nov.

- A-B. holotype.
86Z018-8, (8.9 x 101).
C-D. 87ZW01-4, (11 x 108).
F-G. lateral view.
86Z018-9, (8.8 x 115).

The specimens C-E collected from the borehole Rodinga No.4 and others from Ooraminna No.1.

The scale bars below A is 9 μ m for B; 11 μ m for D, E; 22 μ m for G and 45 μ m for A, C, F.

Plate LXI

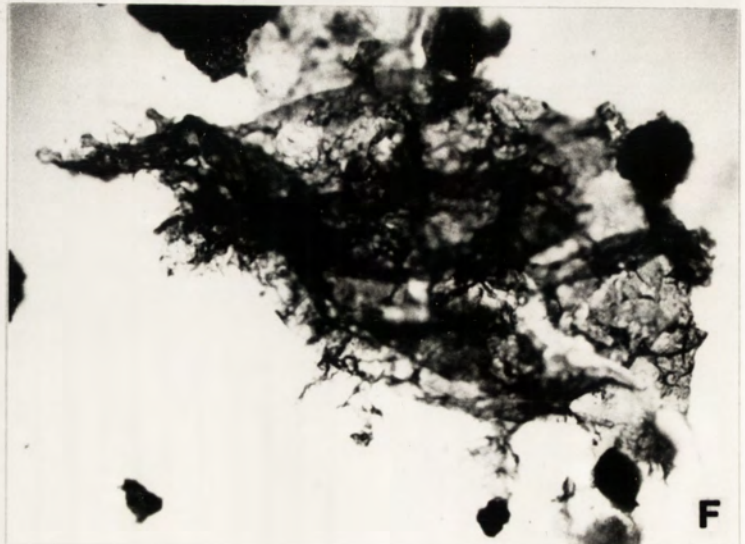
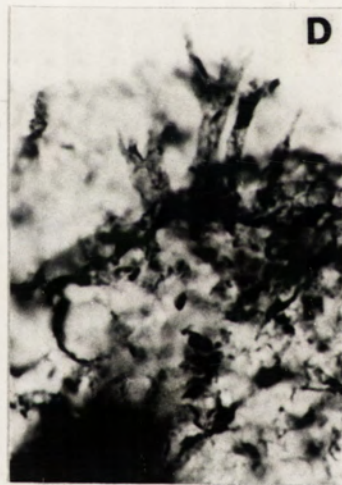
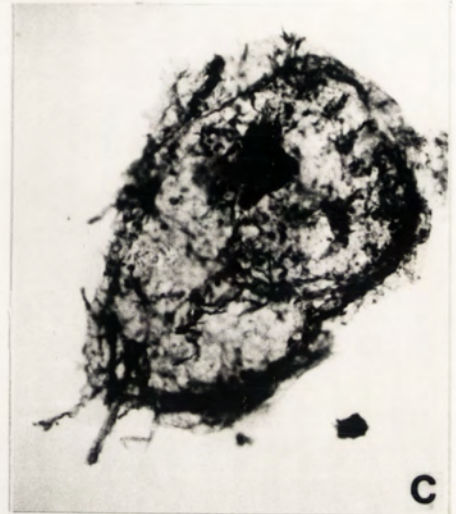
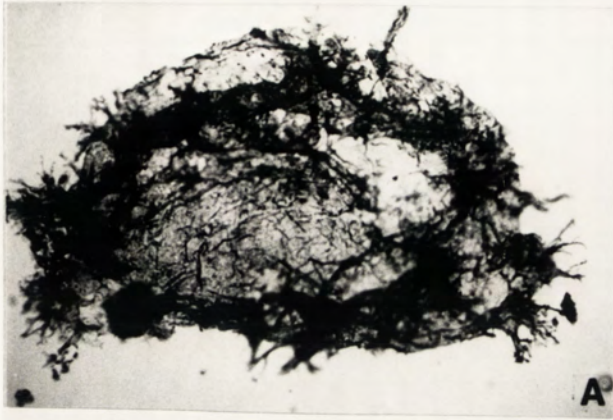


Plate LXII

Figs.A-C. *Multifronsphaeridium pelorium* sp. nov.

A-B. 86Z386-1, (5.5 x 116).

B. note multiply branched processes.

C. 87ZW01-6, (21 x 108.5).

Figs.D-G. *Variomargosphaeridium multiramum* gen. et sp. nov.

D-E. Holotype, 87ZW15-3, (7.3 x 98).

F-G. 87ZW05.

The specimens A-B collected from the borehole Ooraminna No.1 and others from Rodinga No.4.

The scale bars in F are 100 μ m and in G 10 μ m. The bar below A is 22 μ m for E; 37 μ m for B; 45 μ m for D; 90 μ m for C and 120 μ m for A.

Plate LXII

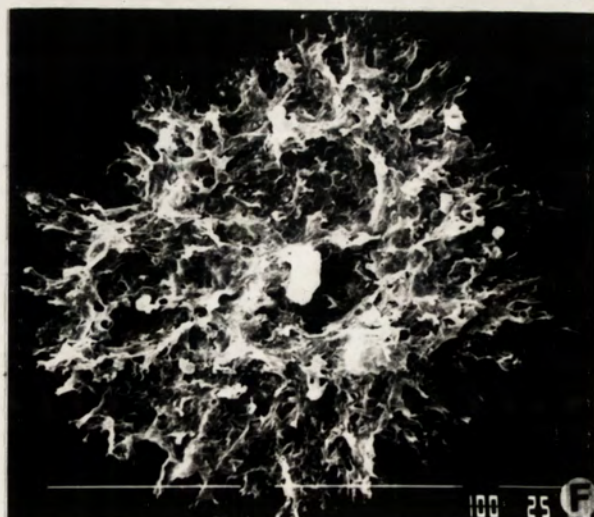
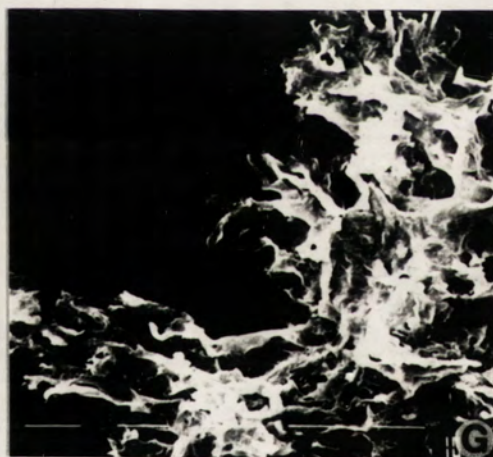
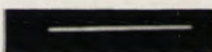


Plate LXIII

- Figs.A-H. *Variomargosphaeridium litoschum* gen. et sp. nov.
A-B. 87ZW01.
C-D. holotype, 87ZW15-4, (14 x 98.5).
E. 87ZW02-1, (9.6 x 96).
F. 87ZW01-6, (16.8 x 104).
G-H. 87ZW01-1, (16 x 105.5).

All specimens collected from the borehole Rodinga No.4.

The scale bars in A are 100 μ m and in B 10 μ m. The bars below B are 22 μ m for F, G, H; 37 μ m for D and 90 μ m for C, E.

Plate LXIII

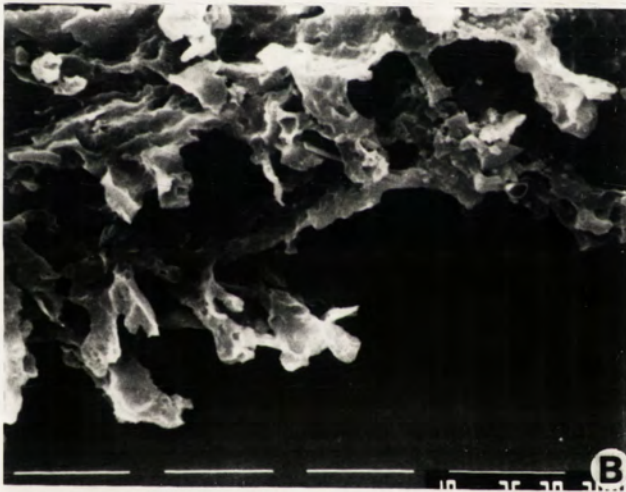
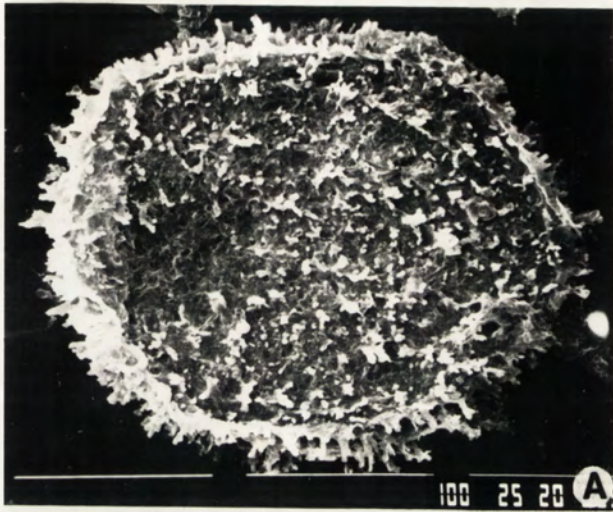


Plate LXIV

- Figs.A-F. *Skiagia spatiosa* sp. nov.
A-B. 87ZW15.
C-D. holotype, 87ZW16-4, (14 x 115).
E-F. 87ZW16-3, (20 x 107.2).

- Figs.G-J. *Skiagia prodigiosa* sp. nov.
G-H. holotype, 87ZW16-4, (18.9 x 105.2).
I-J. 87ZW01.

All specimens collected from the borehole Rodinga No.4.

The scale bars in A, I are 100 μ m and in B, J, 10 μ m. The bars below F are 22 μ m for D, F, H and 75 μ m for C, E, G.

Plate LXIV

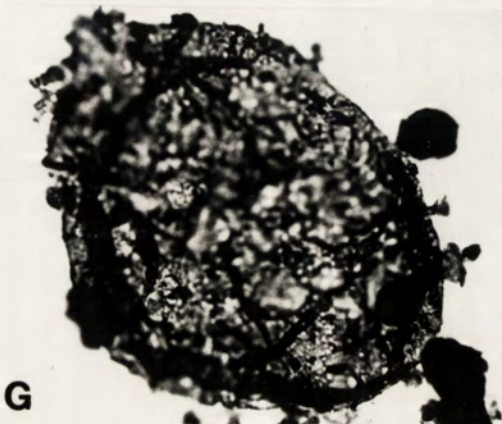
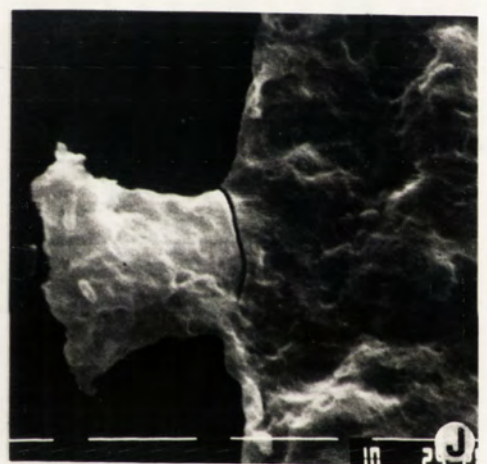
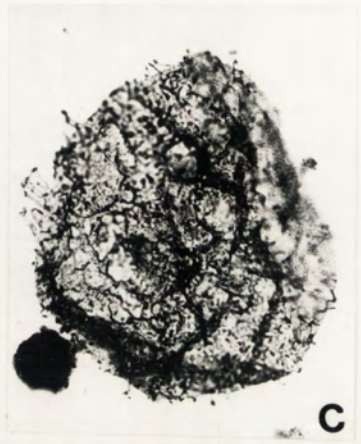


Plate LXV

Figs.A-E. *Goniosphaeridium cratum* sp. nov.

A-B. 86Z003.

C. holotype. 87ZW01-2, (11 x 120).

D. 87ZW01-6, (5 x 112.5).

E. 86Z005-1, (4.1 x 112.8).

Figs.F-J. *Goniosphaeridium crebrum* sp. nov.

F-H. Holotype, 86Z227-1, (13.2 x 102.6).

I-J. 86Z004-3, (19 x 105.2).

The specimens F-H collected from the borehole Ooraminna No.1 and others from Rodinga No.4.

The scale bar in A is 100 μ m and in B 10 μ m . The bar below F is 22 μ m for G, H; 37 μ m for C, D, J; 45 μ m for E, F and 90 μ m for I.

Plate LXV

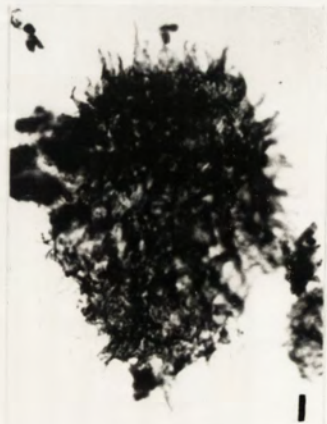
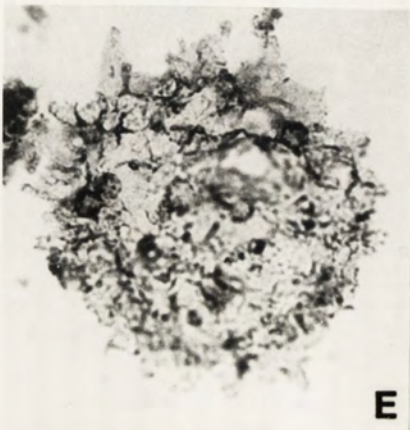
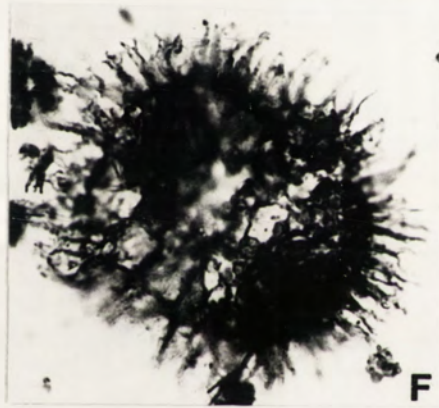
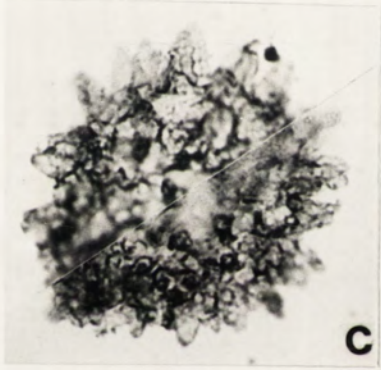
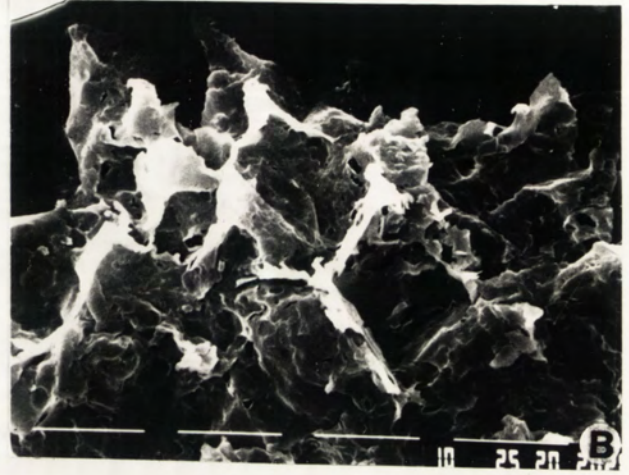


Plate LXVI

Figs.A-G. *Hocosphaeridium scaberfacies* gen et sp. nov.

- A 86Z386.
- B. 86Z386-3, (7.1 x 99.5).
- C. holotype, 87ZW01-8, (15.4 x 112).
- D. 87ZW02-2, (12.3 x 120).
- E. 87ZW02-1, (2.1 x 117.5).
- F. 87ZW02-1, (14.8 x 95.5).
- G. 86Z386-1, (16 x 107).

Fig.H. *Goniosphaeridium* sp. A.
87ZW01-1, (21 x 110).

Fig.I. *Goniosphaeridium* sp. B.
86Z017-3, (11 x 104.1).

The specimens A, B, G, I collected from the borehole Ooraminua No.1 and others from Rodinga No.4.

The scale bar below D is 44 μ m for E; 75 μ m for I; 90 μ m for B, G, H; 120 μ m for A and 150 μ m for C, D, F.

Plate LXVI

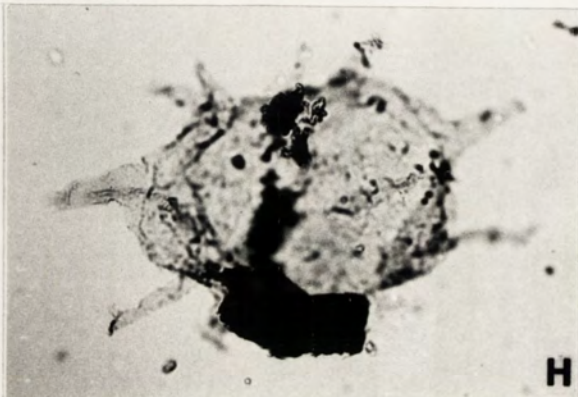
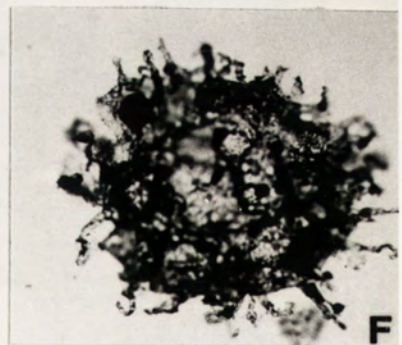
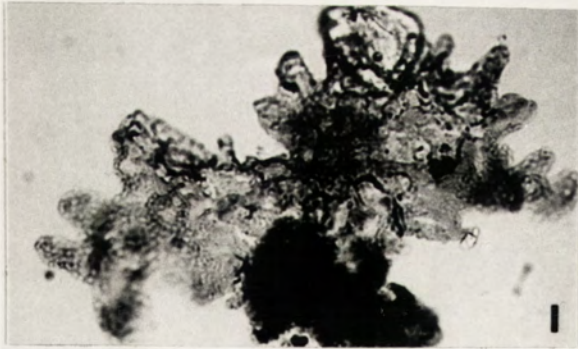
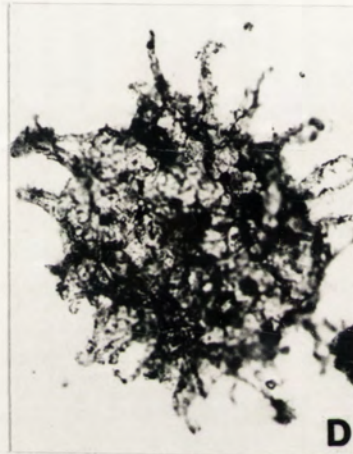
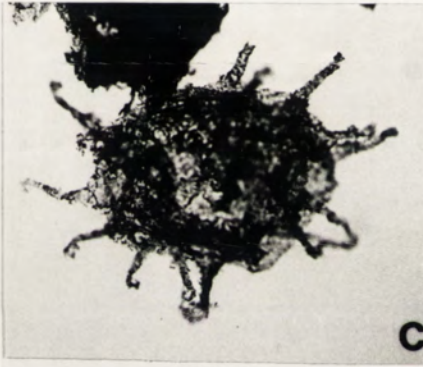
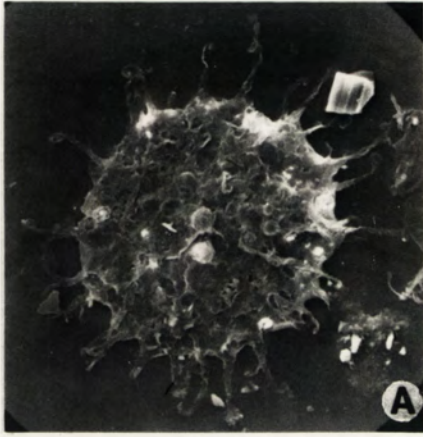


Plate LXVII

- Figs.A-G. *Filisphaeridium nassokarum* sp. nov.
A-B. Holotype, 87ZW15-2, (17.5 x 108.5).
C-D. 87ZW09.
E-G. 86Z018-9, (11.5 x 115.5).
- Figs.H-I. *Goniosphaeridium cf. crebrum* sp. nov.
87ZW08-2, (9.5 x 99).

The specimens E-G collected from the borehole Ooraminna No.1 and others from Rodinga No.4.

The scale bars in C are 100 μ m and in D are 10 μ m. The bar below A is 44 μ m for B, I; 75 μ m for F, G; 90 μ m for A; 150 μ m for H and 180 μ m for E.

Plate LXVII

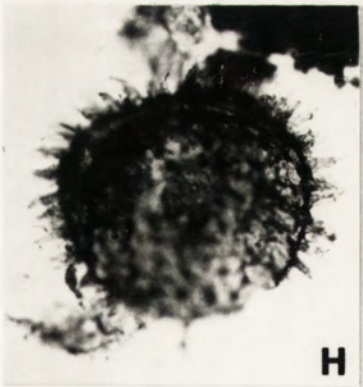
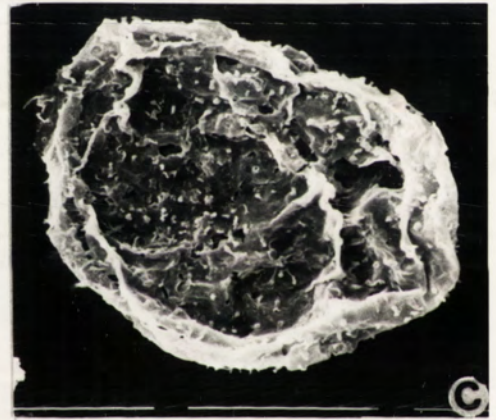
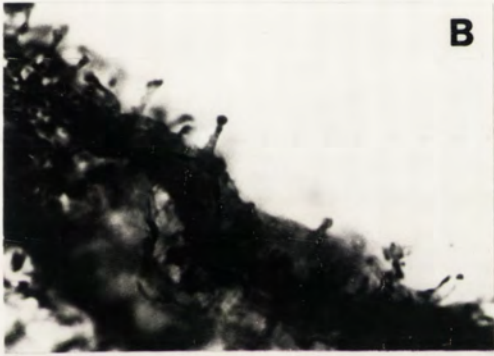
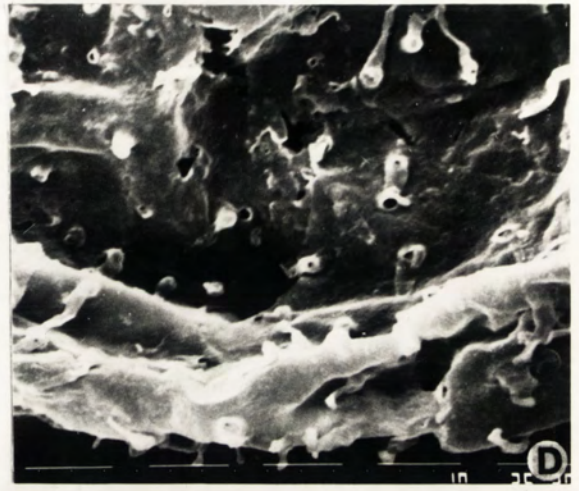
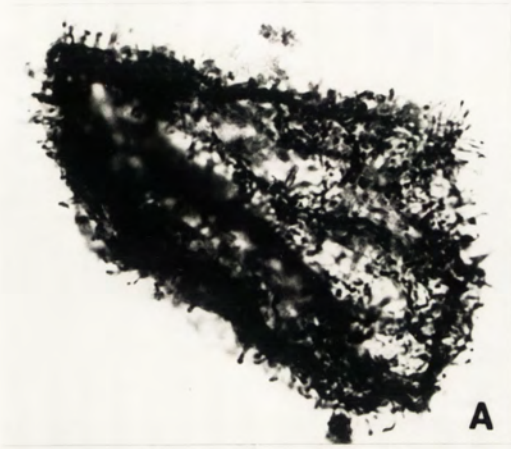


Plate LXVIII

- Figs.A-I. *Solisphaeridium ? araithekum* sp. nov.
A-B. 87ZW01-4, (3 x 115).
C. 87ZW01.
D-E. 87ZW01-1, (5.5 x 114).
F. 87ZW16-6, (11 x 119), holotype.
G. 87ZW01-5, (15.5 x 120).
H. 86Z227-1.
I. 87ZW01-5, (9.3 x 11.3).

The specimen H collected from the borehole Ooranminna No.1 and others from Rodinga No.4.

The scale bars in C are 100 μ m. The bar below C is 36 μ m for E; 45 μ m for B, H, I and 90 μ m for A, C, D, F, G.

Plate LXVIII

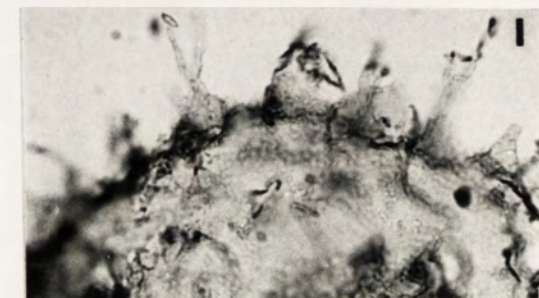
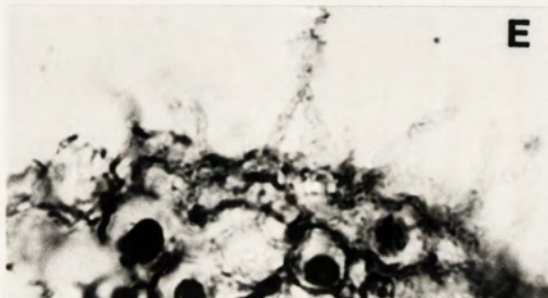
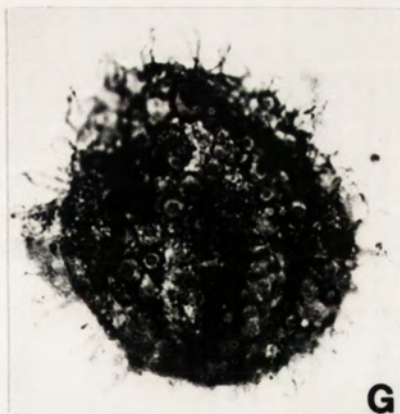
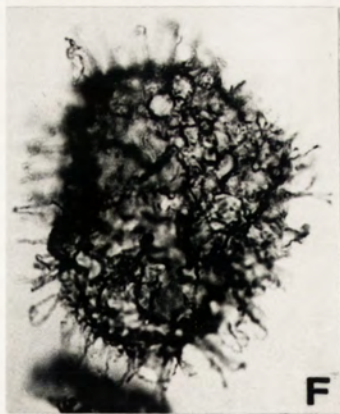
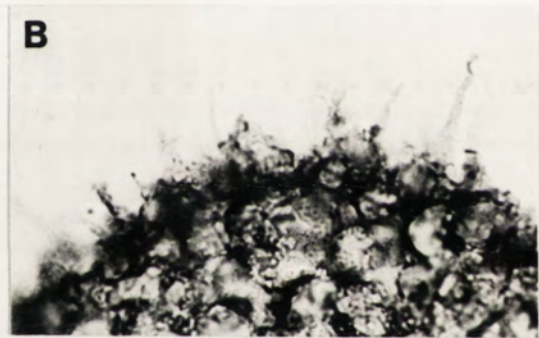
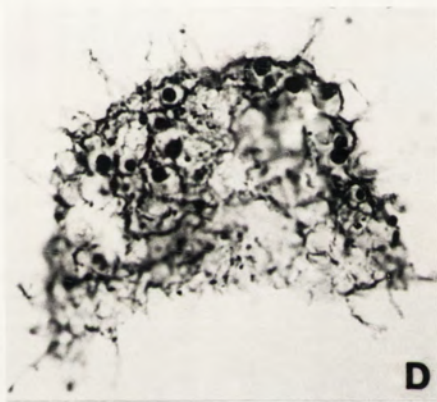
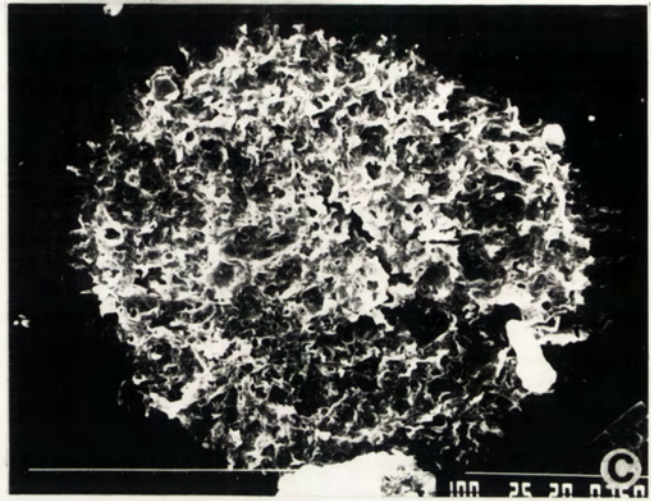
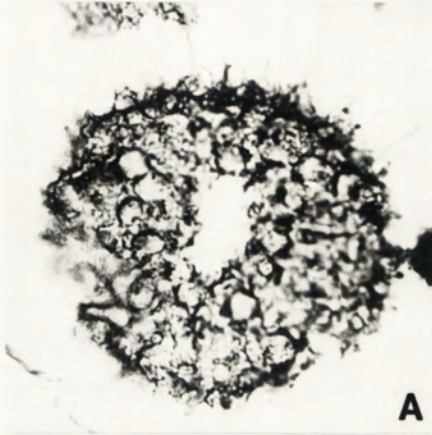


Plate LXIX

- Figs.A-G. *Gorgonisphaeridium pulchrum* sp. nov.
A-B. 87ZW18.
C. 87ZW09.
D. 87ZW15.
E-F. holotype, 87ZW15-2, (12.7 x 116.5).
G. 87ZW09.

All specimens collected from the borehole Rodinga No.4.

The scale bars in A, D are 100 μ m and in B, C, G, 10 μ m. The bar in F is 22 μ m for F and 90 μ m for E.

Plate LXIX

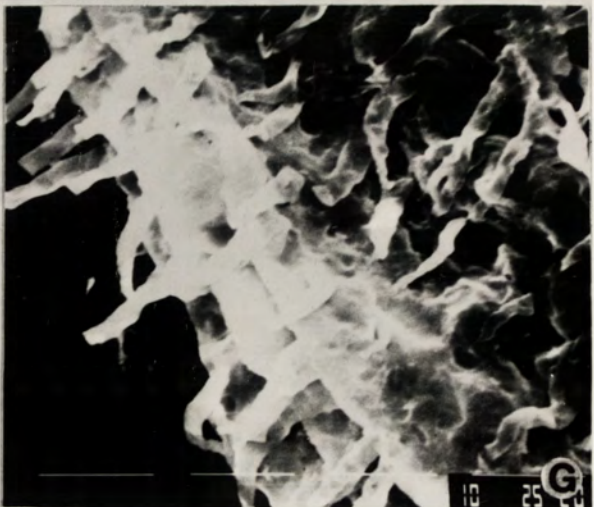
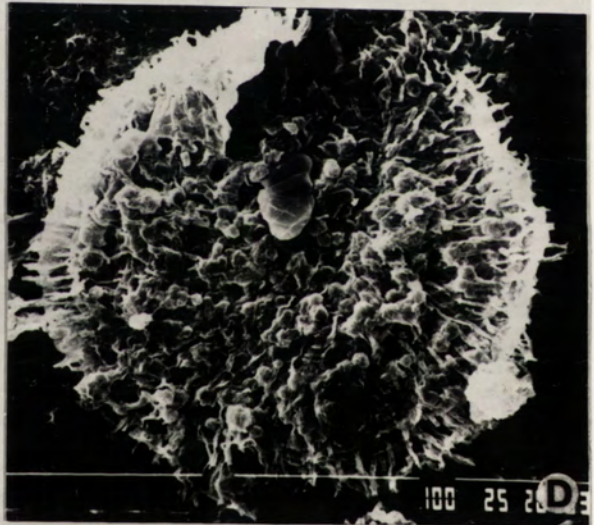
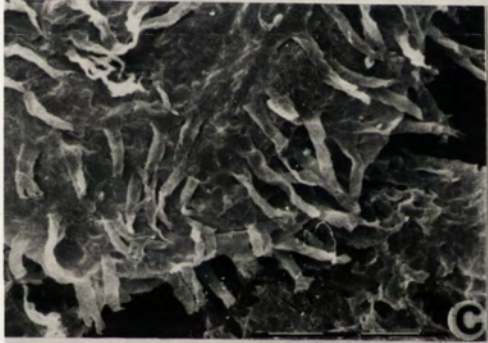
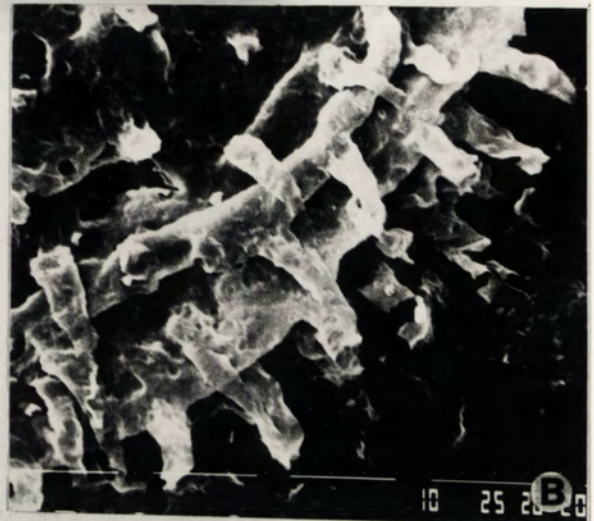
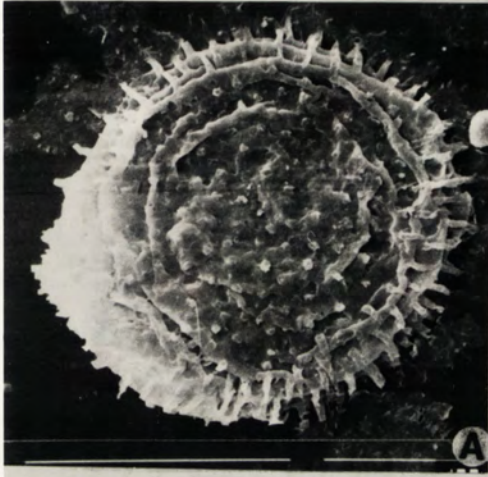


Plate LXX

Figs.A-I *Gorgonisphaeridium curtoblastum* sp. nov.

- A-B. holotype, 87ZW15-6, (5.3 x 106).
- C. 87ZW15-4, (13 x 109).
- D. 87ZW08-4, (13.5 x 95.4).
- E. 87ZW16-3, (6.2 x 110).
- F-G. 86Z03.
- H. 87ZW18.
- I. 87ZW09, transitional form of *G. pulchrum* sp. nov..

All specimens collected from the borehole Rodinga No.4.

The scale bars in H, I are 100 μ m. The bar below D is 45 μ m for C, G; 75 μ m for B, D, E and 90 μ m for A, F.

Plate LXX

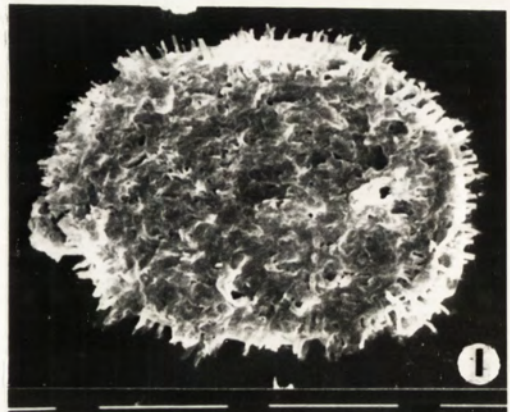
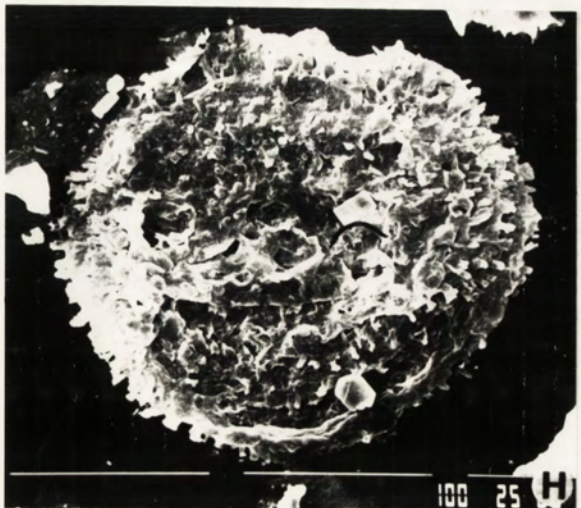
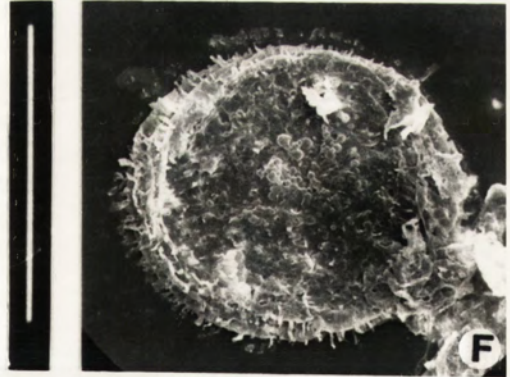
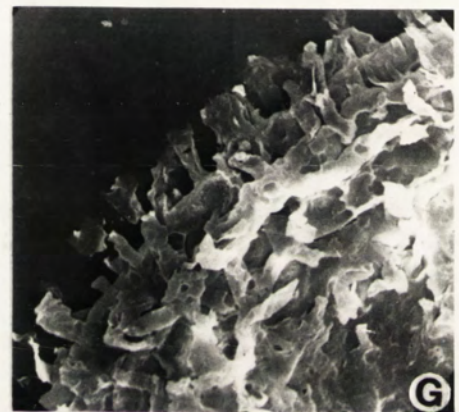
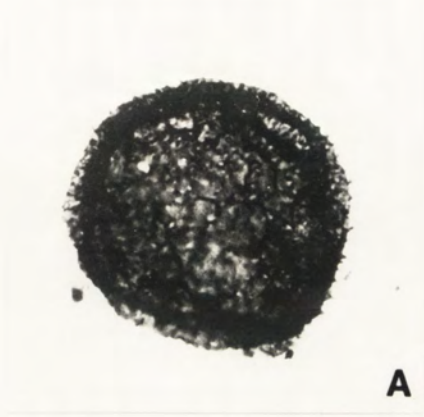


Plate LXXI

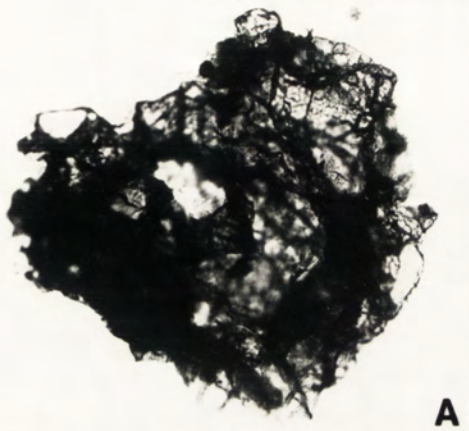
Figs.A-I. *Gorgonisphaeridium inconstanum* sp. nov.

- A-F. holotype, 86Z016-3, (18 x 109).
- G-H. 87ZW08-6, (14.8 x 114.8).
- I. 86Z002-1, (14 x 100).

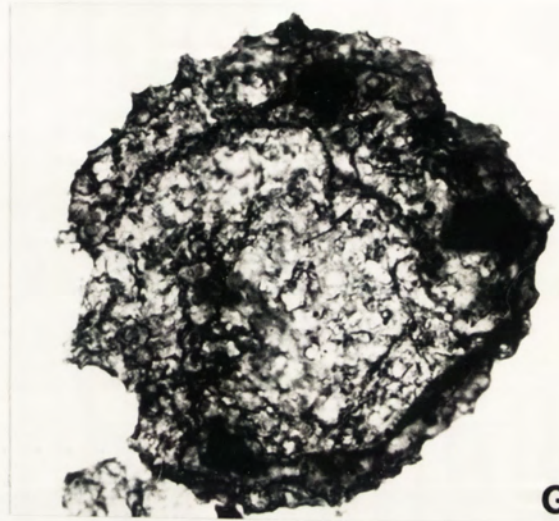
All specimens collected from the borehole Rodinga No.4.

The scale bars below B are 18 μ m for B, C, D, E, F; 22 μ m for I; 37 μ m for H; 75 μ m for A and 90 μ m for G.

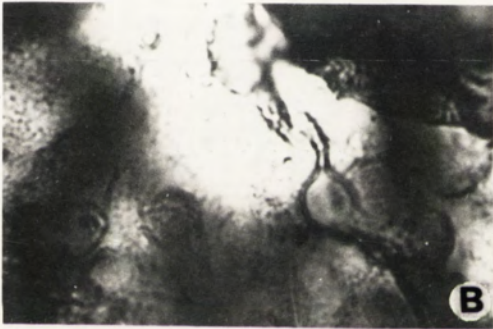
Plate LXXI



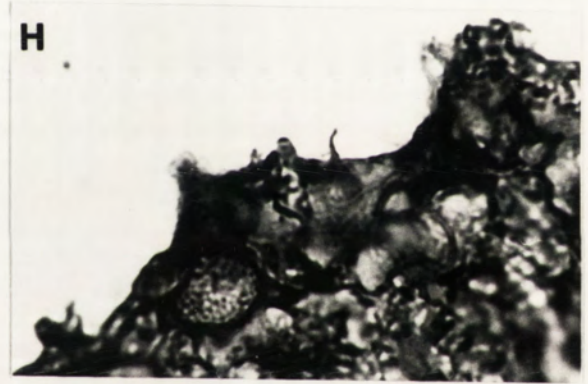
A



G



B



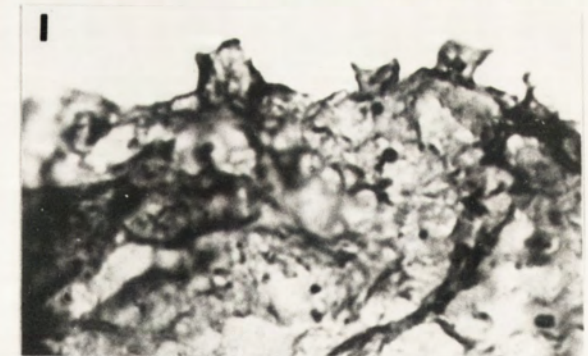
H



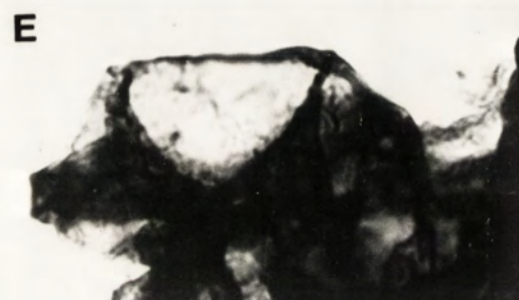
C



D



I



E



F

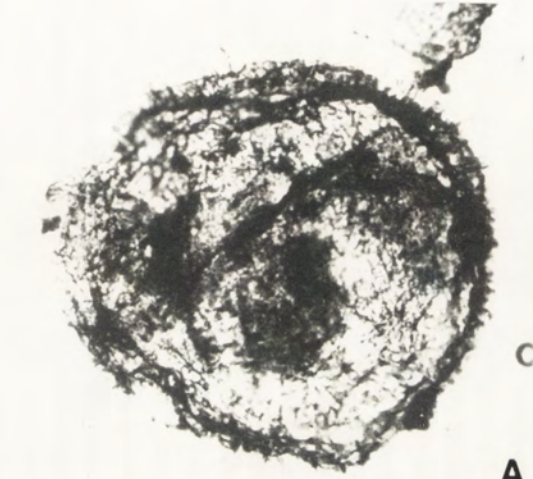
Plate LXXII

- Figs.A-H. *Baltisphaeridium plerusente* sp. nov.
A-B. 87ZW08-1, (10.5 x 107.7), holotype.
C. 87ZW11-1, (16.5 x 103).
D. 87ZW11-1, (13.5 x 101.7)
E-F. 87ZW15-3, (20.5 x 107.8).
G. 87ZW08.
H. 87ZW15-1, (18 X 106.3).

All specimens collected from the borehole Rodinga No.4.

The scale bars below D are 22 μ m for B, D, F, H and 95 μ m for A, C, E.
The bars in G are 100 μ m.

Plate LXXII



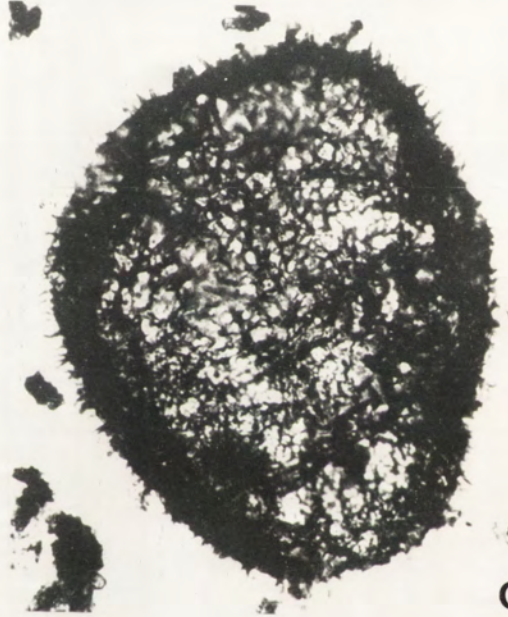
C

A

D

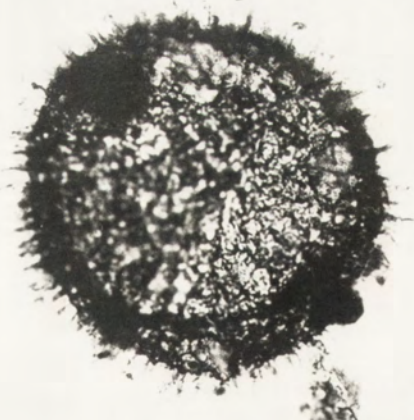


B

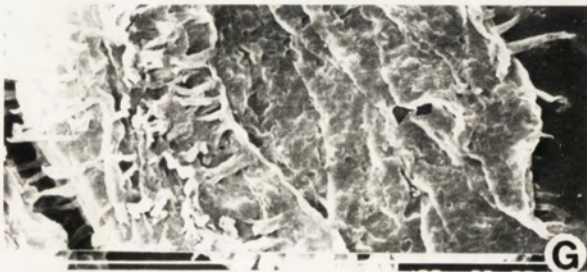


C

F



E



G



H

Plate LXXIII

- Figs.A-I. *Baltisphaeridium rarusente* sp. nov.
A-B. 86Z002.
C-D. holotype, 87ZW19-3, (19x102.3).
E-F. 87ZW19-3, (5.9x103).
G. 87ZW15-1, (9.7x95.5).
H. 87ZW15-1, (18x106.3).
I. 86Z004-2, (10.5x111.2).

All specimens collected from the borehole Rodinga No.4.

The scale bar below C is 40 μ m for B; 45 μ m for D, F, G; 150 μ m for C, E and 180 μ m for A, H, I.

Plate LXXIII

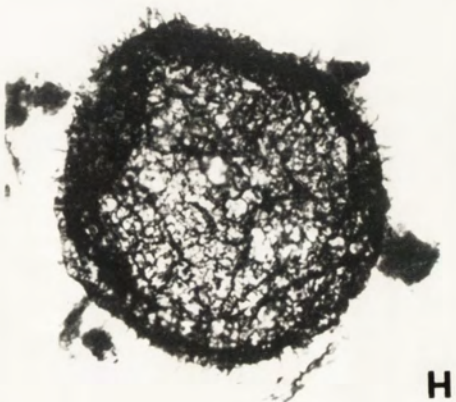
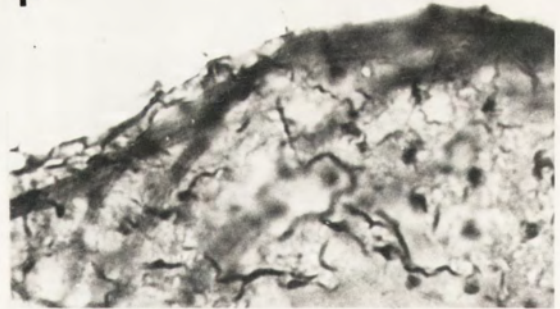
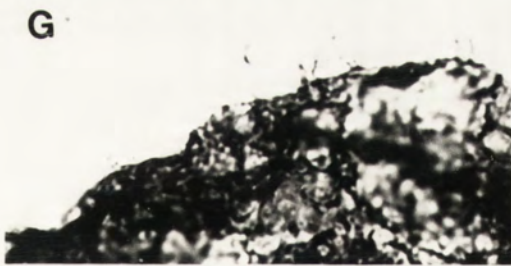
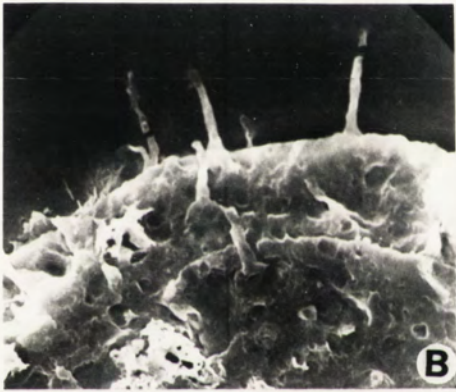
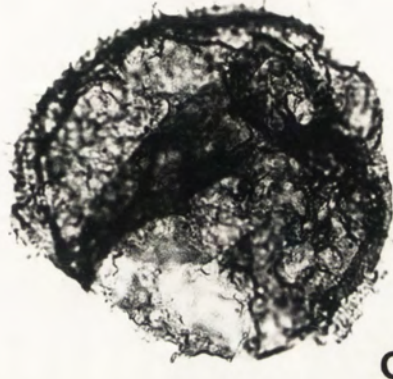
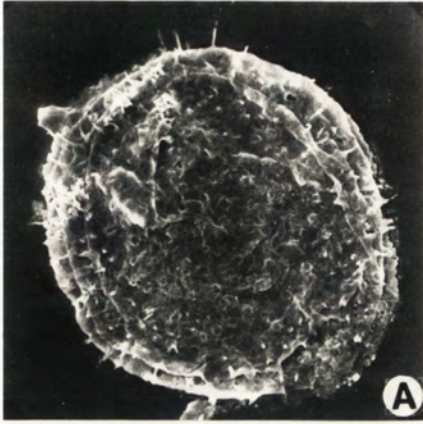


Plate LXXIV

- Figs. A-H. *Trachyhystrichosphaera hystricosa* sp. nov.
A-B. 86Z003.
C-D. holotype, 87ZW17-2, (14.5x97.2).
E. 87ZW15-5, (5.5x118).
F-G. 87ZW17-3, (13.5x120).
H. 87ZW16-3, (10.5x107.2).

All specimens collected from the borehole Rodinga No.4.

The scale bar below E is 45 μ m for D, G and 180 μ m for C, E, F, H. The bars in A are 100 μ m and in B are 10 μ m.

Plate LXXIV

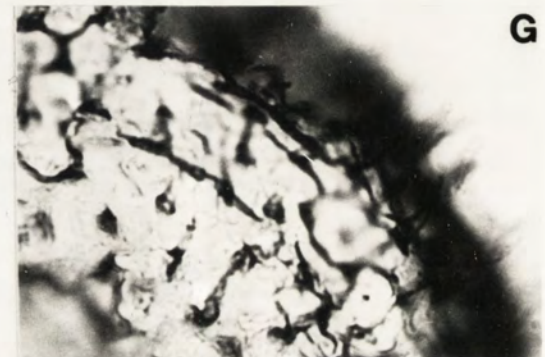
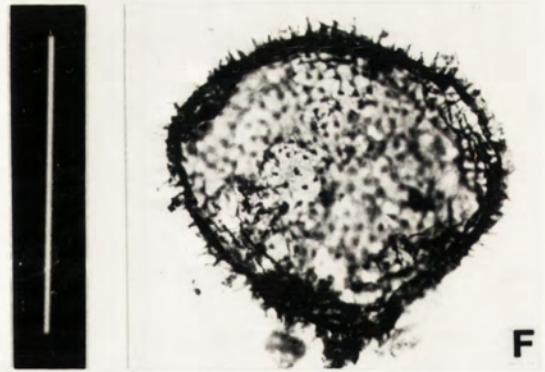
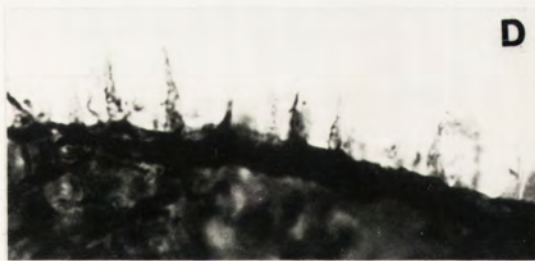
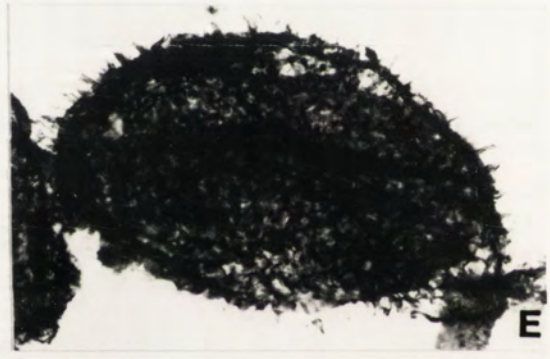
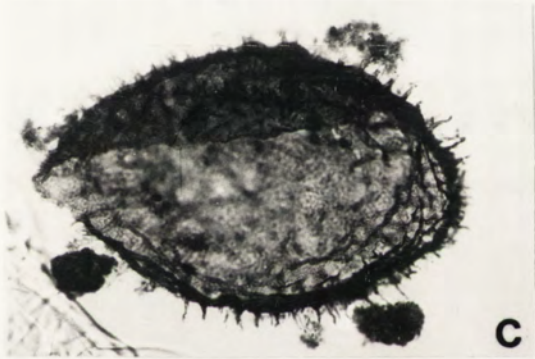
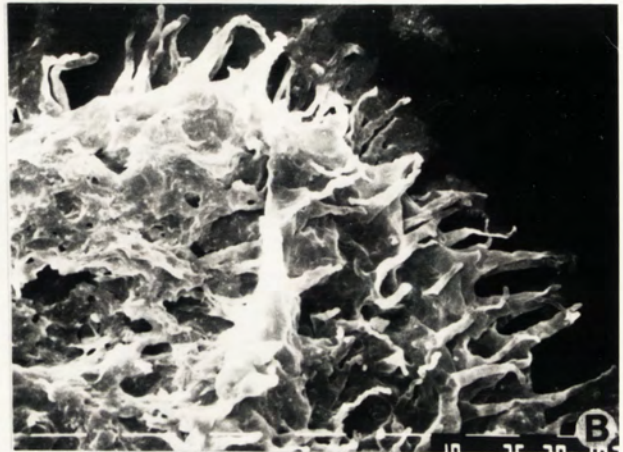
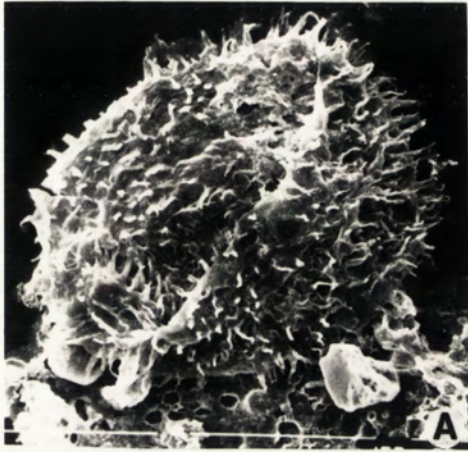


Plate LXXV

Figs.A-I. *Trachyhystrichosphaera tribulosa* sp. nov.

- A. 87ZW11.
- B. 87ZW16-5, (11.2x108).
- C. 87ZW15-3, (19.2x95).
- D. 87ZW15-3, (14x119).
- E-F. 87ZW17-5, (14x118.5), holotype.
- G. 87ZW15-4, (5.5x111.5).
- H. 87ZW16-3, (14x108).
- I. 87ZW15.

All specimens collected from the borehole Rodinga No.4.

The scale bars in A are 100 μ m and in I, 10 μ m. The bar below F is 22 μ m for F; 75 μ m for D, E, G and 90 μ m for B, C, H.

Plate LXXV

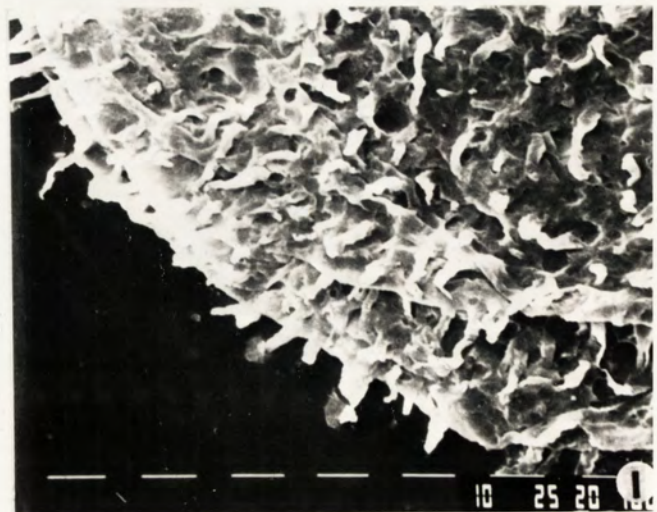
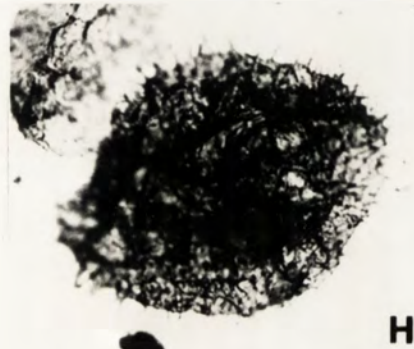
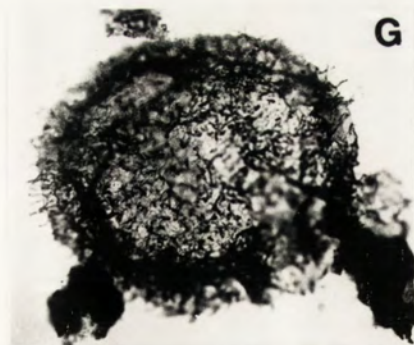
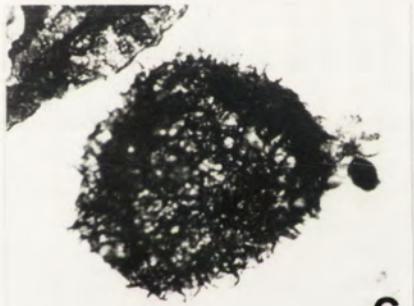
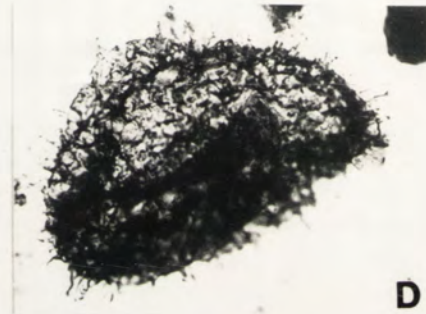
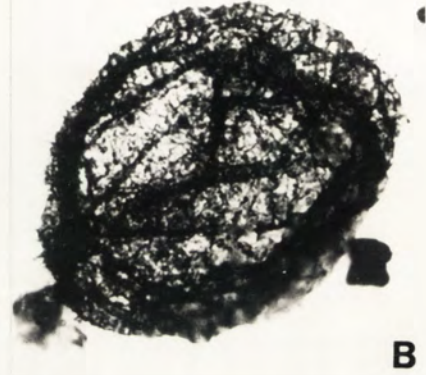
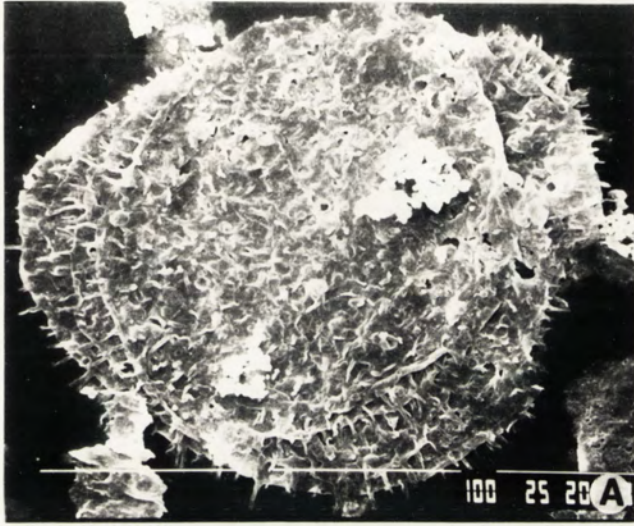


Plate LXXVI

Figs.A-H. *Trachyhystrichosphaera spargaspina* sp.nov.

- A. 86Z003.
- B. 87ZW11.
- C. 87ZW17-3, (7.5x115).
- D. 87ZW01.
- E. 86Z003.
- F. 87ZW04-1, (13.5x108).
- G. 87ZW17.
- H. 87ZW17-1, (9.5x118), holotype.

Fig. I. *Obruchevella* sp. B.
86Z005-2, (15.8x117.1).

All specimens collected from the borehole Rodinga No.4.

The bars in A, B, D, E, G are 100 μ m. The bar below I is 44 μ m for F;
75 μ m for I and 150 μ m for C, H.

Plate LXXVI

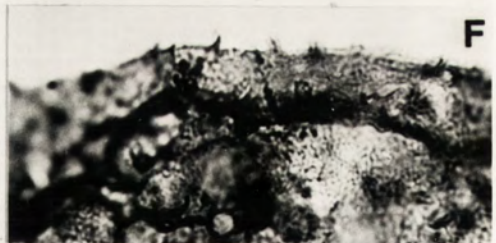
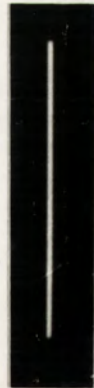
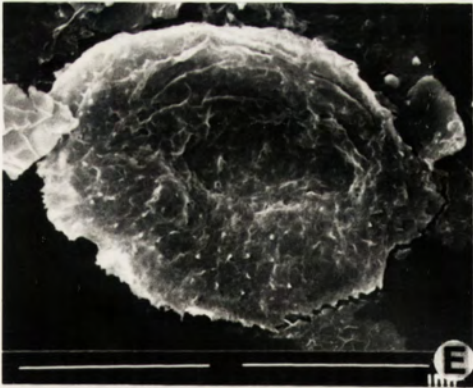
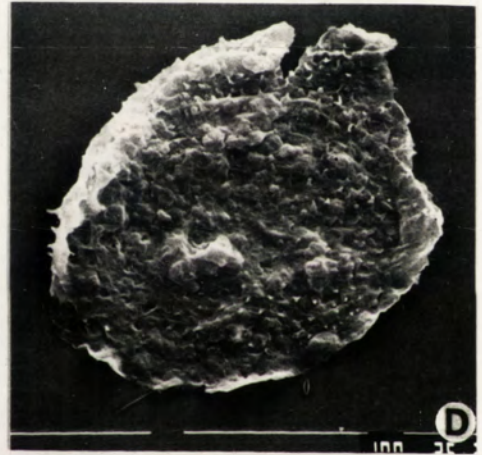
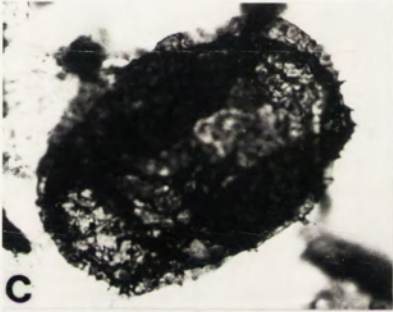


Plate LXXVII

Figs.A-H. *Trachyhysyrichosphaera pedanaspina* sp. nov.

- A. 87ZW18.
- B. 87ZW17.
- C-D. holotype, 87ZW17-3, (10x118.7).
- E-F. 87ZW04-1, (4x109.5).
- G. 87ZW07.
- H. 87ZW17-3, (12x103).

All specimens collected from the borehole Rodinga No.4.

The scale bars in A, B are 100 μ m and in G, 10 μ m. The bar below D is 44 μ m for D, F and 150 μ m for C, E, H.

Plate LXXVII

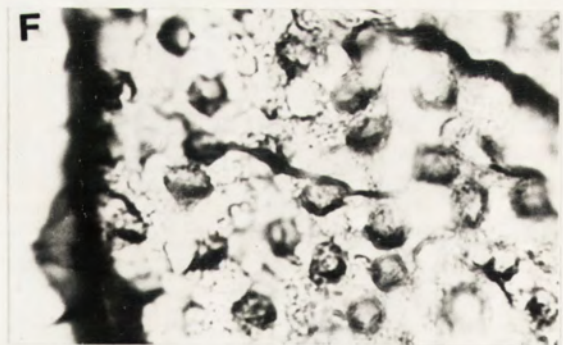
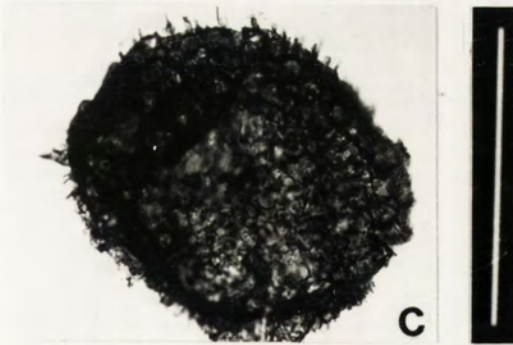
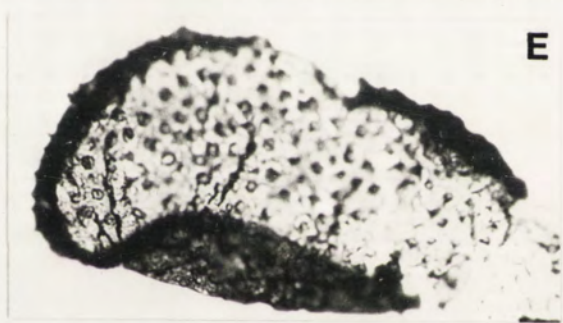
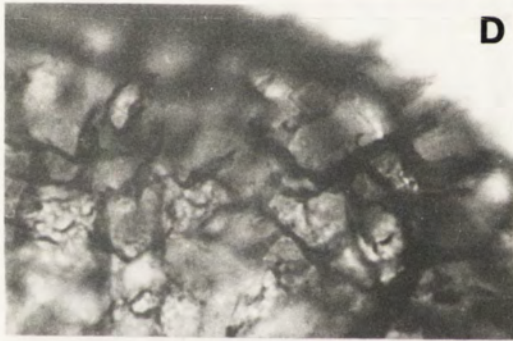
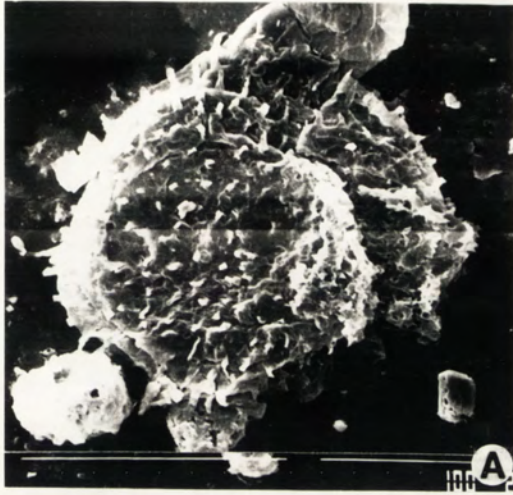


Plate LXXVIII

Figs.A-I. *Trachyhystrichosphaera obtusaspina* sp. nov.

- A. 87ZW01.
- B-C. 87ZW15-4, (19 x 100.8).
- D-E. 87ZW15-3, (22 x 104).
- F. 87ZW15-2, (9.2 x 115.1).
- G-I. holotype, 87ZW15-3, (17.8 x 115).

All specimens collected from the borehole Rodinga No.4.

The scale bars in A are 100 μ m. The bar below F is 44 μ m for E, F, H, I; 75 μ m for C, 150 μ m for B, and 180 μ m for D, G.

Plate LXXVIII

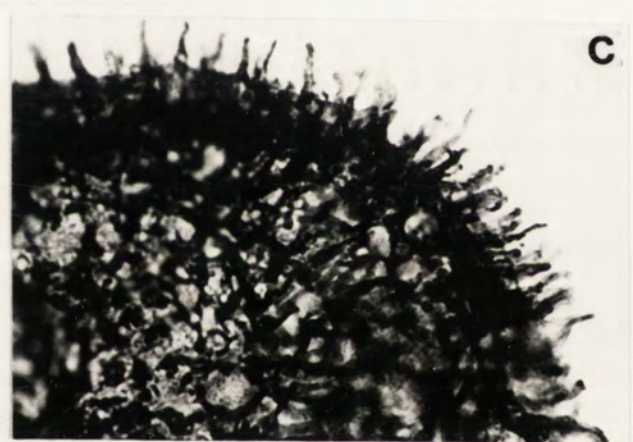
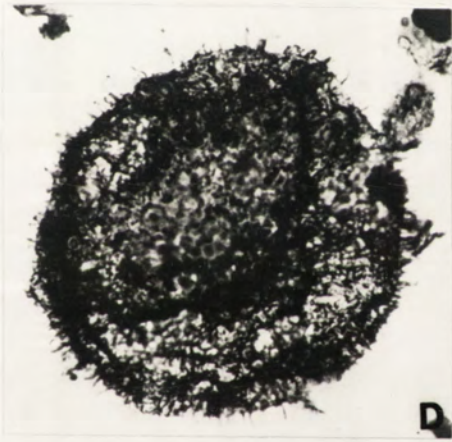
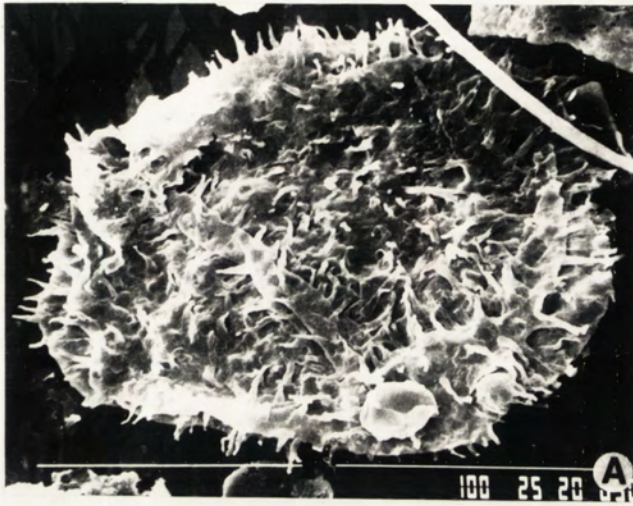


Plate LXXIX

Figs.A-G. Unnamed specimens B.

- A. 87ZW18.
- B. 87ZW10.
- C. 87ZW17.
- D. 87ZW15.
- E. 87ZW01.
- F-G. 86Z003.

All specimens collected from the borehole Rodinga No.4.

The scale bars in A, B, C are 100 μ m and in D, E, 10 μ m. The bar below G is 22 μ m for G and 120 μ m for F.

Plate LXXIX

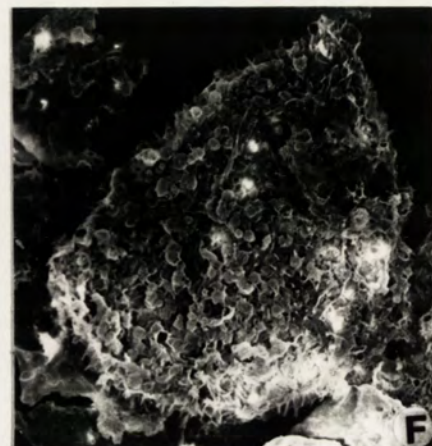
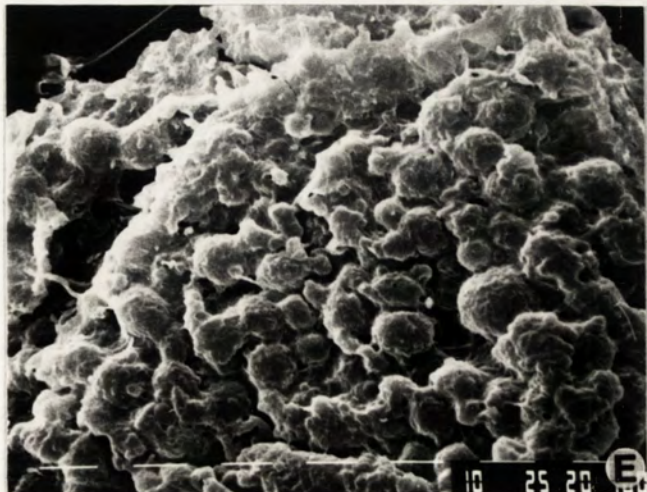
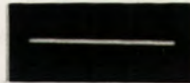
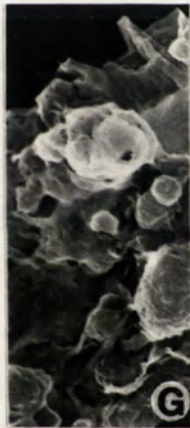
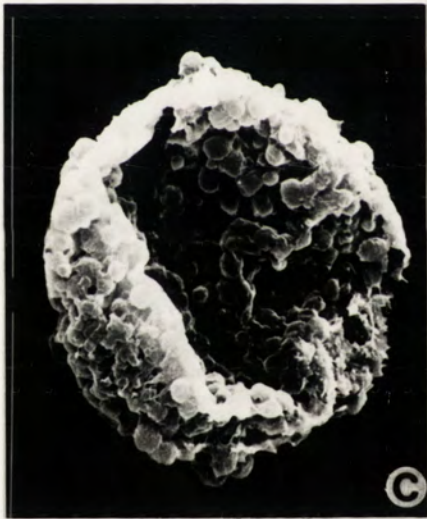
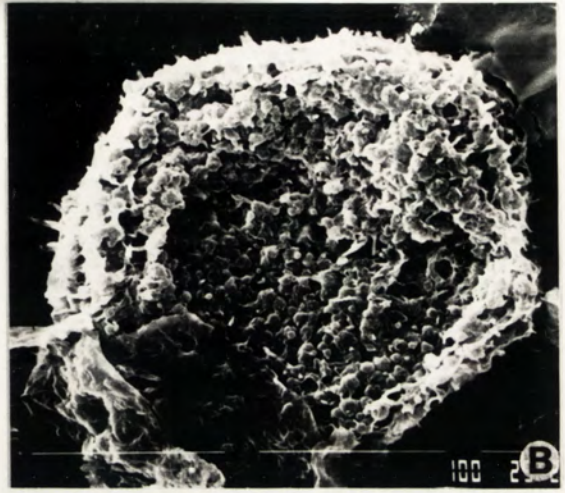
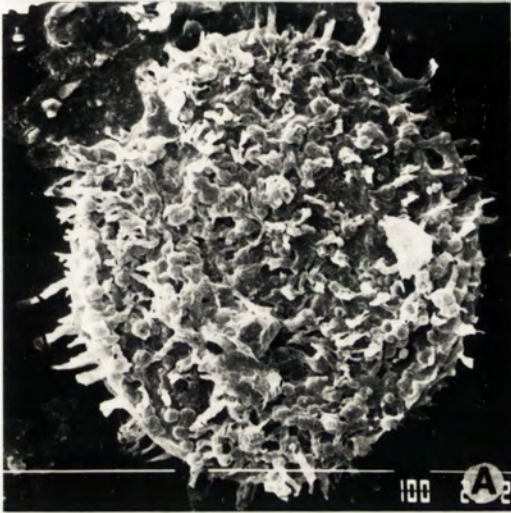


Plate LXXX

Figs.A-H. *Trachyhystrichosphaera triangula* sp. nov.

A-C. 87ZW15-5, (14 X 113.5), holotype.

D-E. 86Z018-7, (14 X 100.1).

F. 87ZW08-5, (9.5 X 111.5).

G. 87ZW08.

H. 86Z002-4, (17.1 X 110.5).

Figs.I-J. *Micrhystridium* sp.

I. 87ZW01-3, (7.1 X 97.2).

J. 87ZW01-4, (14 X 103.5).

The specimens D-E collected from the borehole Ooraminna No.1 and others from Rodinga No.4.

The scale bars in G are 100 μ m. The bar below D is 18 μ m for I; 22 μ m for C, E, J; 37 μ m for B; 75 μ m for A, D, H and 90 μ m for F.

Plate LXXX

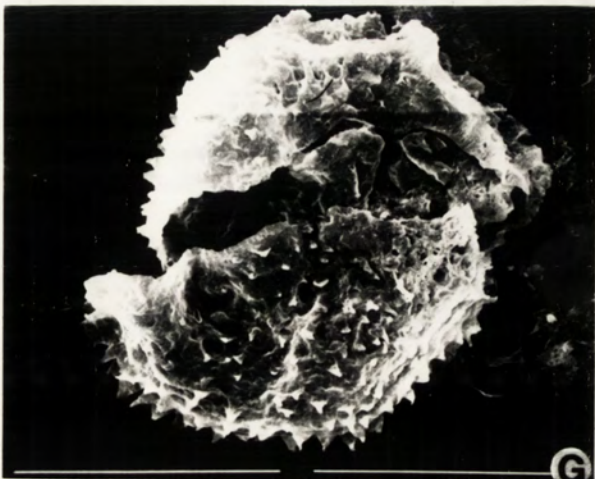
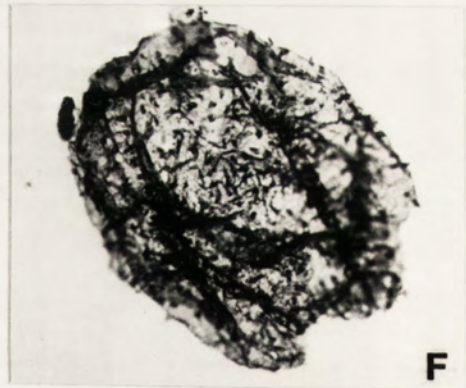
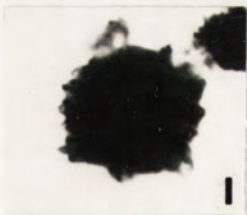
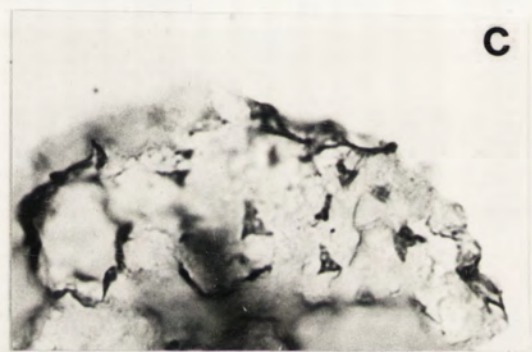
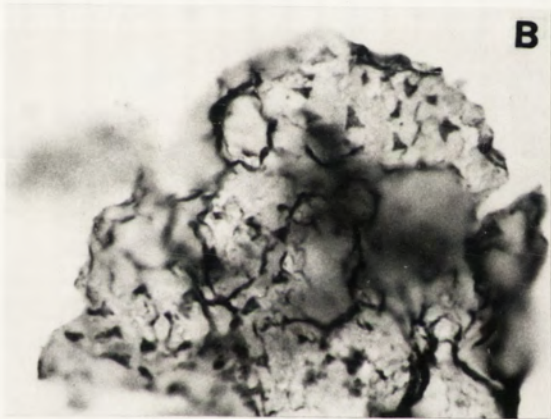
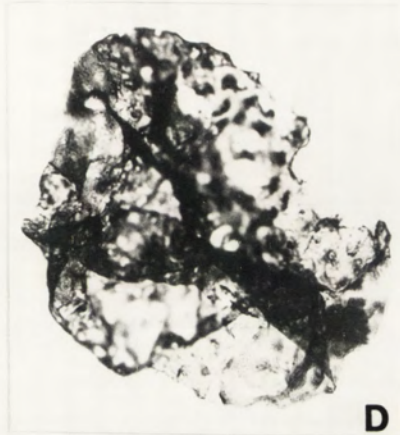
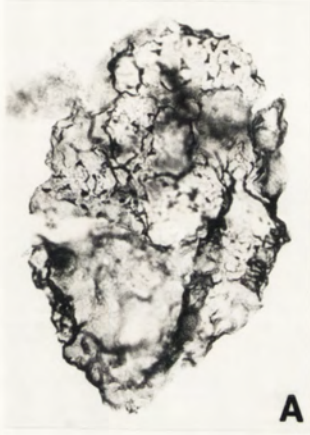


Plate LXXIX

Figs.A-G. Unnamed specimens B.

- A. 87ZW18.
- B. 87ZW10.
- C. 87ZW17.
- D. 87ZW15.
- E. 87ZW01.
- F-G. 86Z003.

All specimens collected from the borehole Rodinga No.4.

The scale bars in A, B, C are 100 μ m and in D, E, 10 μ m. The bar below G is 22 μ m for G and 120 μ m for F.

Plate LXXIX

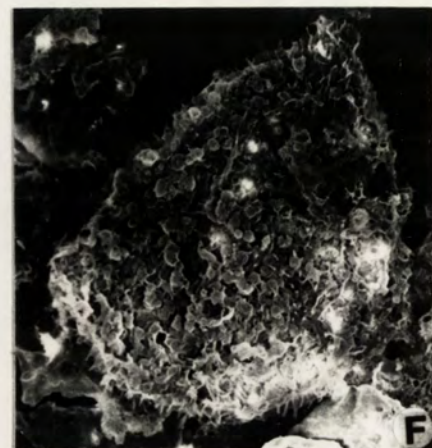
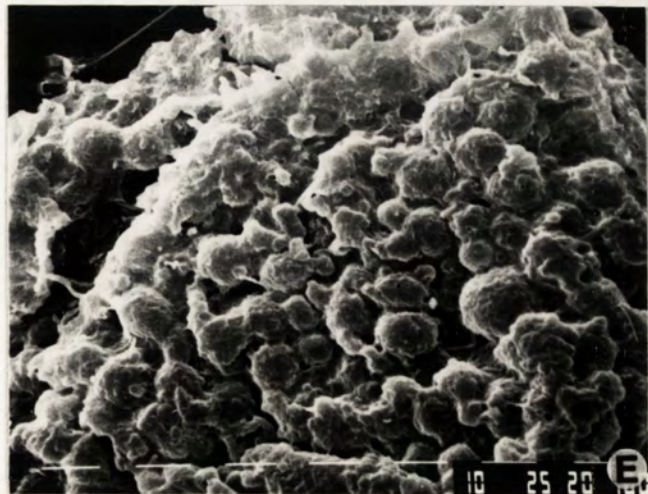
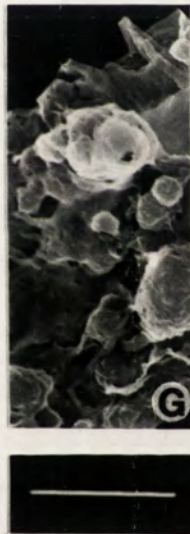
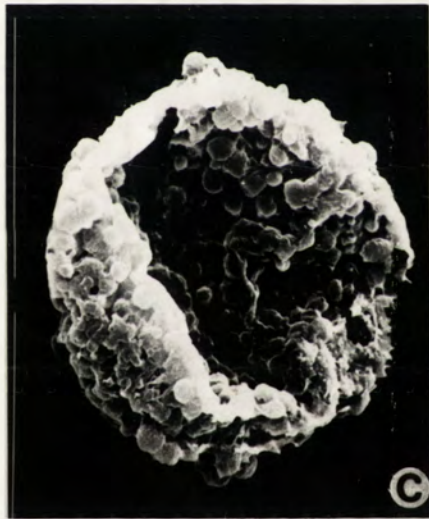
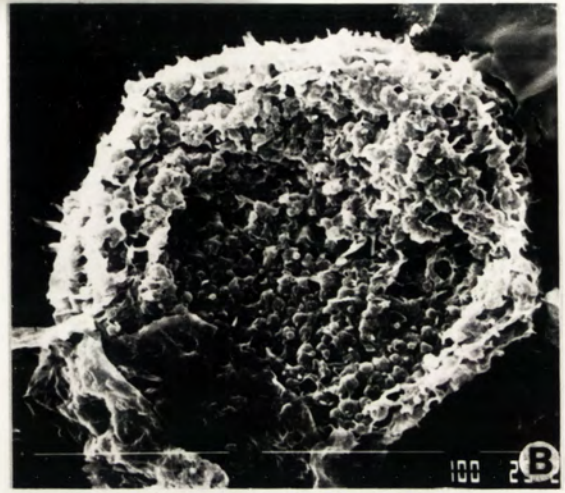
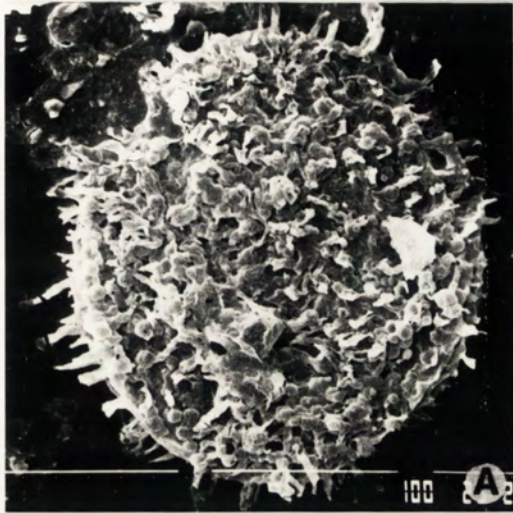


Plate LXXX

- Figs.A-H. *Trachyhystrichosphaera triangula* sp. nov.
A-C. 87ZW15-5, (14 X 113.5), holotype.
D-E. 86Z018-7, (14 X 100.1).
F. 87ZW08-5, (9.5 X 111.5).
G. 87ZW08.
H. 86Z002-4, (17.1 X 110.5).

- Figs.I-J. *Micrhystridium* sp.
I. 87ZW01-3, (7.1 X 97.2).
J. 87ZW01-4, (14 X 103.5).

The specimens D-E collected from the borehole Ooraminna No.1 and others from Rodinga No.4.

The scale bars in G are 100 μ m. The bar below D is 18 μ m for I; 22 μ m for C, E, J; 37 μ m for B; 75 μ m for A, D, H and 90 μ m for F.

Plate LXXX

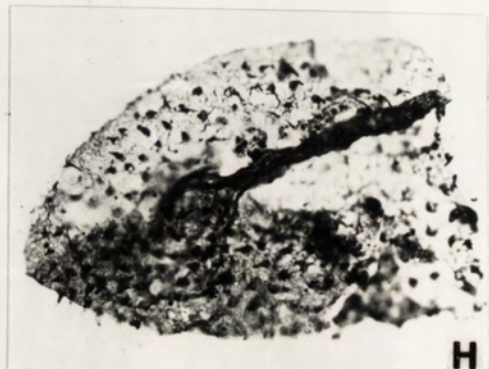
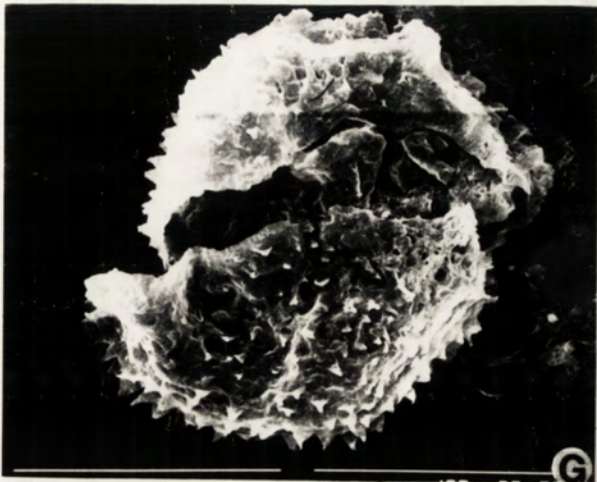
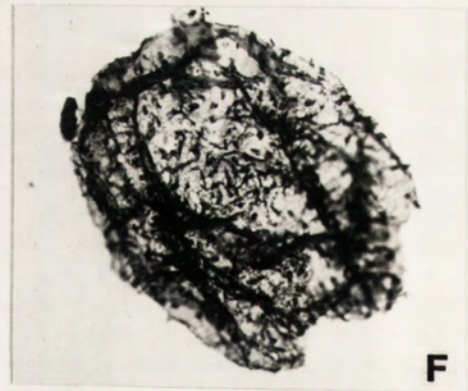
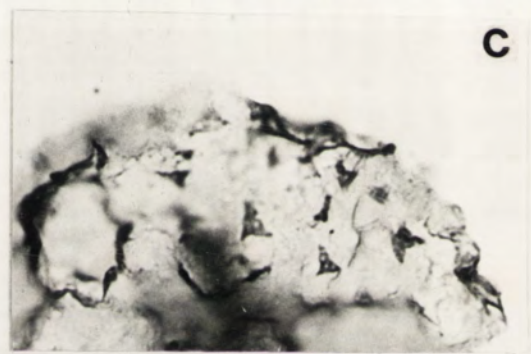
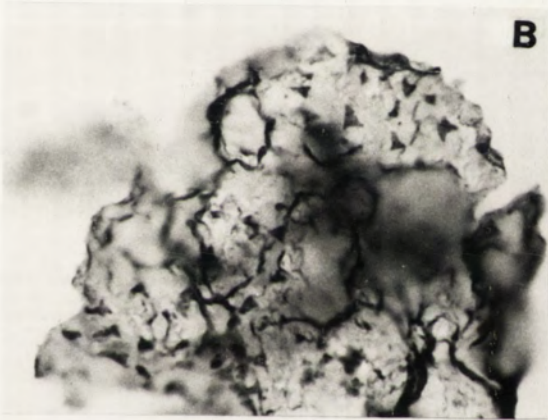
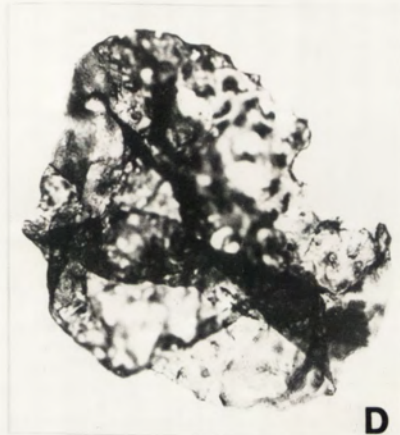
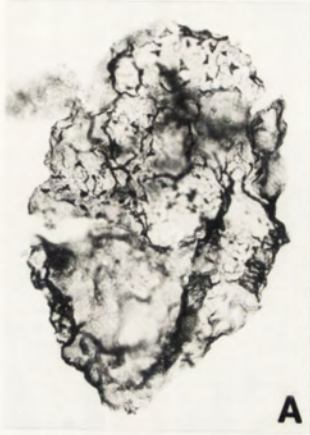


Plate LXXXI

Figs. A-I. *Somphosphaeridium amphilaphum* gen. sp. nov.

A-B. holotype, 87ZW08-1, (6 x 103).

C-D. 87ZW08.

E. 87ZW08.

F. 86Z003.

G. 87ZW16-1, (9.5 X 117.7).

H. 87ZW08-4, (5.5 X 109.2).

I. 86Z004.

All specimens collected from the borehole Rodinga No.4.

The scale bars in C, D, E, F are 100 μ m and in D 10 μ m. The bars below F are 44 μ m for B; 75 μ m for G and 180 μ m for A, H, I.

Plate LXXXI

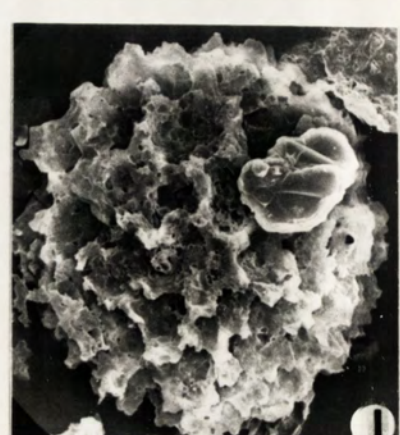
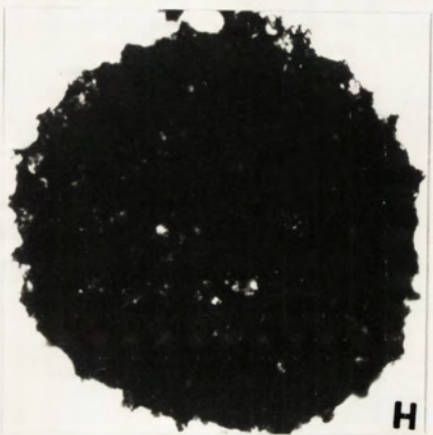
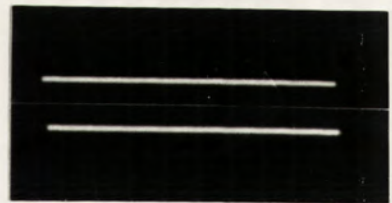
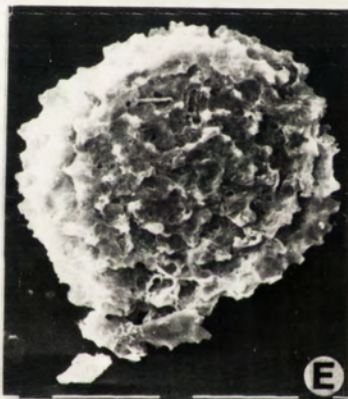
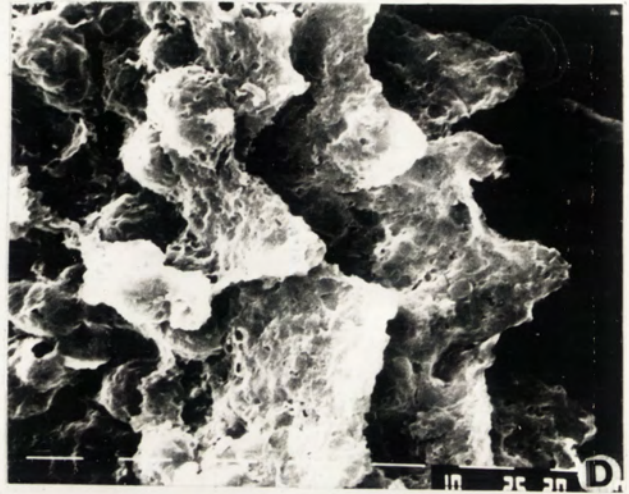
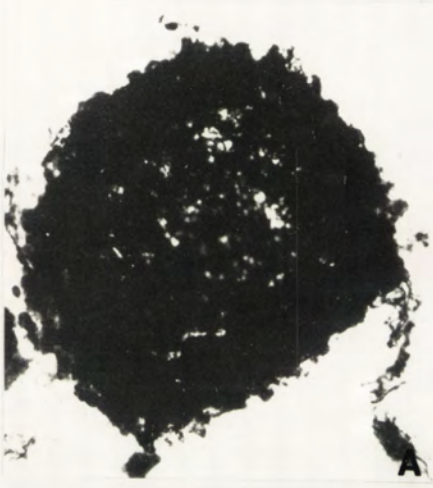


Plate LXXXII

Figs.A-C. *Comasphaeridium crinitum* sp. nov.
87ZW08-6, (18.5 x 106.5), holotype.

Figs.D-J. *Comasphaeridium hispidum* sp. nov.
D. holotype, 87ZW16-1, (21.8 x 110.3).
E. 86Z205-1, (6 X 98).
F. 86Z205-1, (5 X 101.8).
G. 87ZW15-3, (11.5 X 110).
H. 86Z003-5, (16 X 106).
I. 86Z003-6, (12.8 X 118).
J. 86Z005-1, (11.5 X 118.2).

The specimens E, F collected from Ellery Greek section and others from the borehole Rodinga No.4.

The scale bar below B is 37 μ m for E, F; 44 μ m for B, C, D, H, I, J; 75 μ m for G and 150 μ m for A.

Plate LXXXII

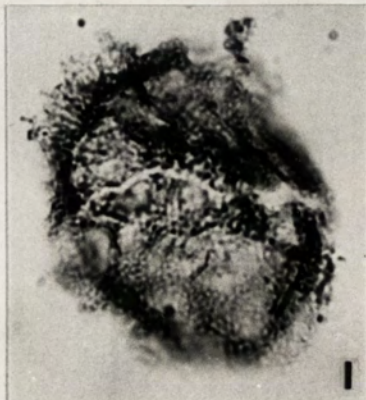
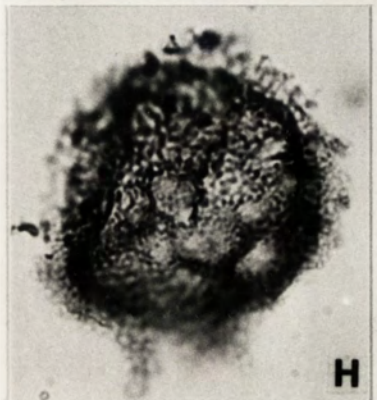
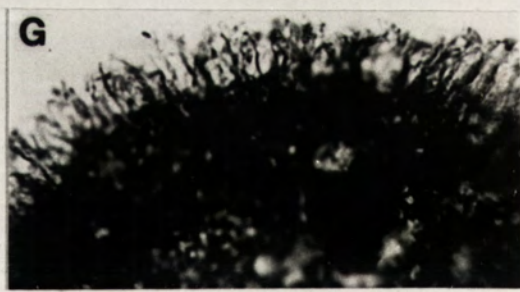
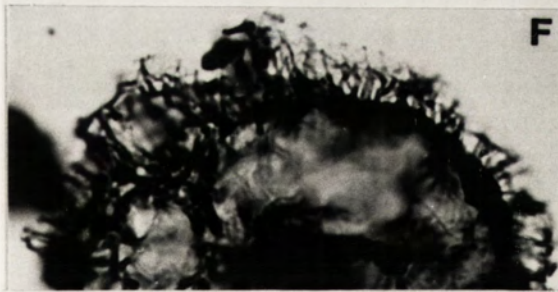
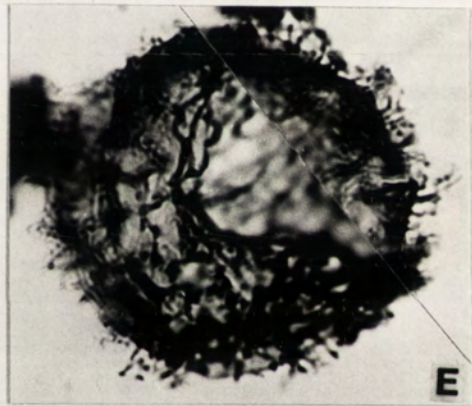
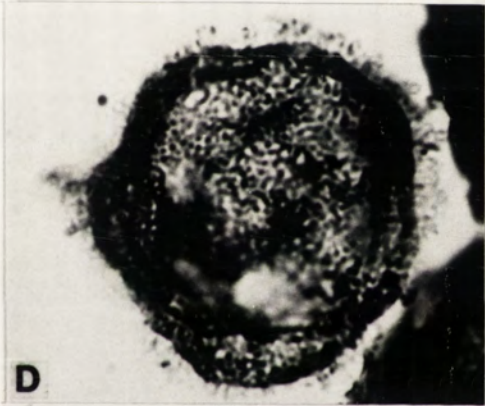
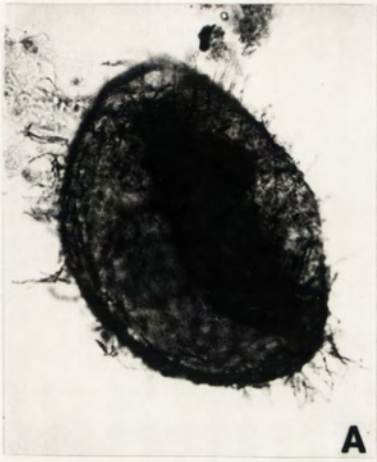


Plate LXXXIII

Figs.A-I. *Cymatiosphaeroides dilutopilum* sp. nov.

- A-B. 87ZW08.
- C-D. holotype, 86Z017-3, (7.5 x 109.5).
- E. 86Z004-4, (10 X 99).
- F. 87ZW01-1, (5.5 X 96.5).
- G. 87ZW01-2, (12.1 X 104).
- H. 87ZW02-4, (11 X 104.5).
- I. 87ZW01.

The specimens C-D collected from the borehole Ooraminna No.1 and others from Rodinga No.4.

The scale bars in A are 100 μ m and in B, I, 10 μ m. The bars below G are 18 μ m for D; 22 μ m for G; 75 μ m for C, E, H and 90 μ m for F.

Plate LXXXIII

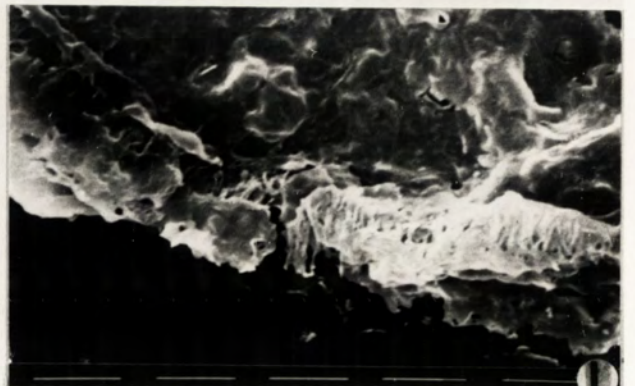
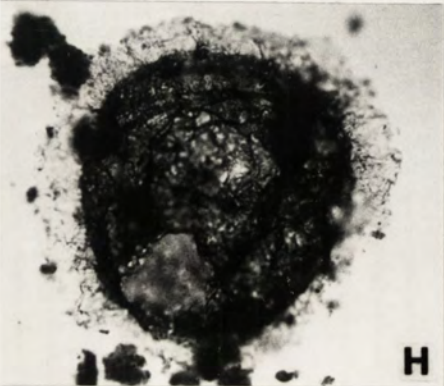
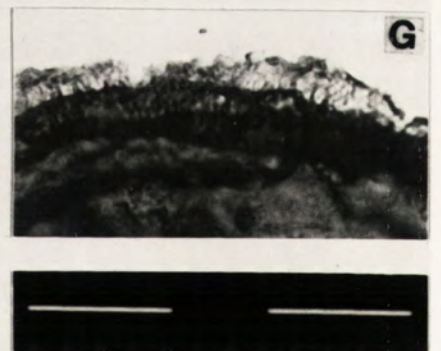
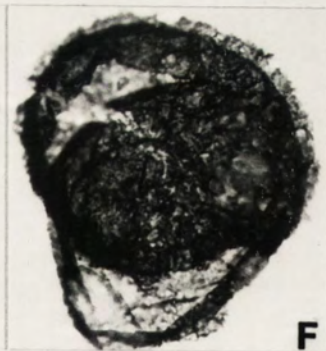
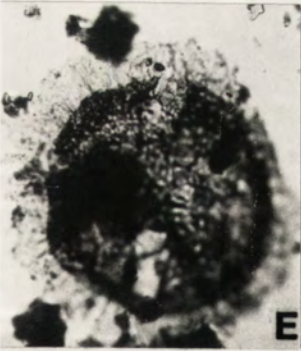
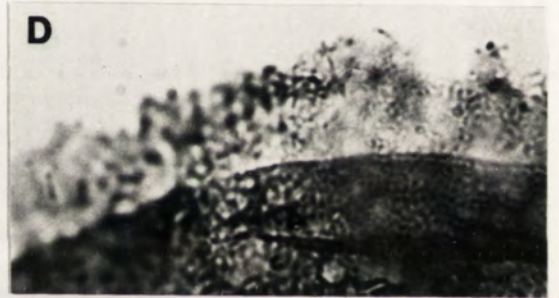
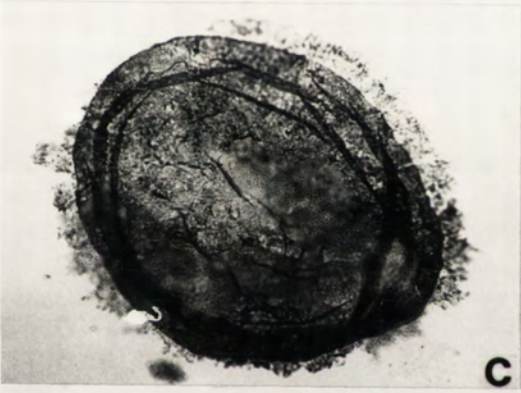
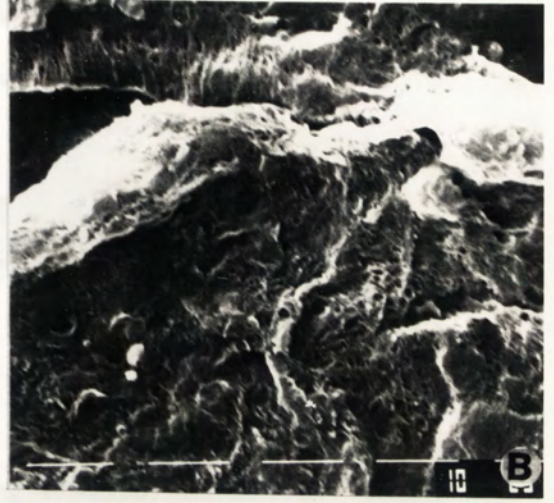
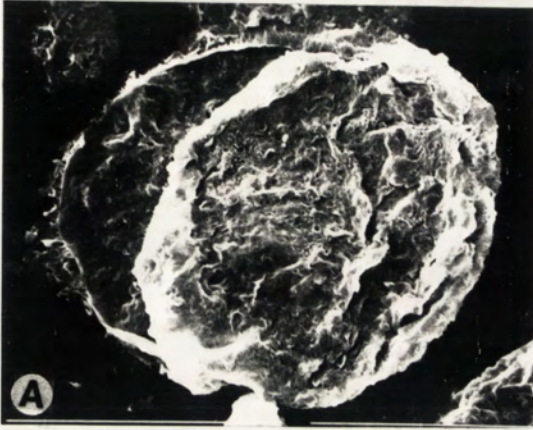


Plate LXXXIV

Figs.A-I. *Cymatiosphaeroides pilatopilum* sp. nov.

- A-B. 87ZW10.
- C-D. holotype, 86Z002-6, (4 x 106.3).
- E-F. 87ZW02-3, (13.5 x 117.2).
- G. 86Z002-6, (6 x 112.5).
- H. 87ZW02-2, (20 x 97).
- I. 87ZW10.

All specimens collected from the borehole Rodinga No.4.

The scale bars in A are 100 μ m and in B, I, 10 μ m. The bar below G is 22 μ m for D, F; 75 μ m for C, G, H and 90 μ m for E.

Plate LXXXIV

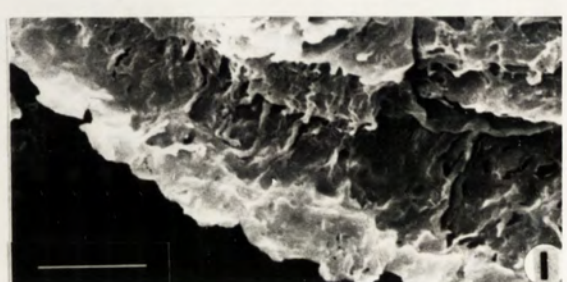
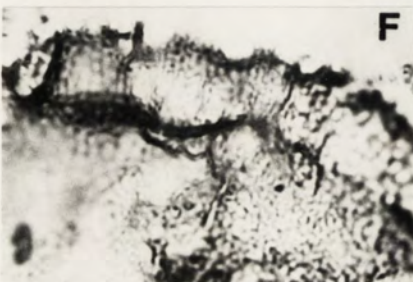
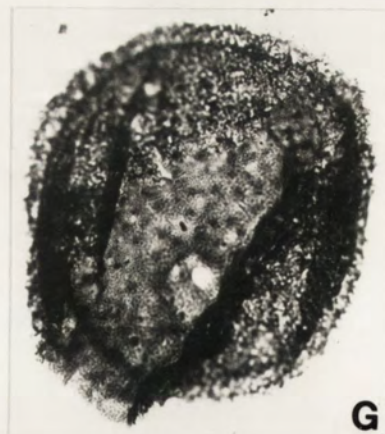
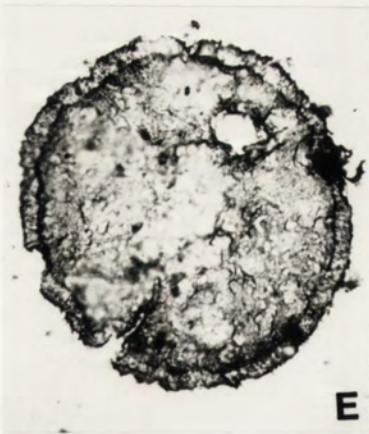
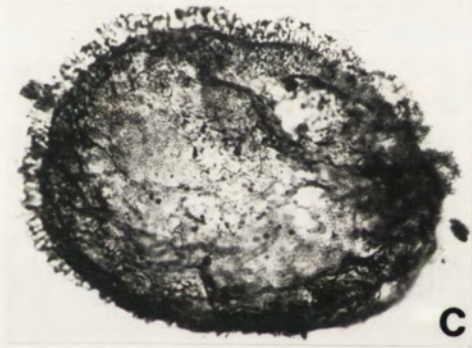
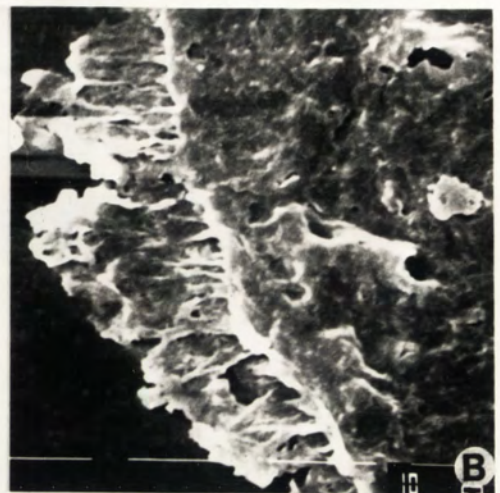
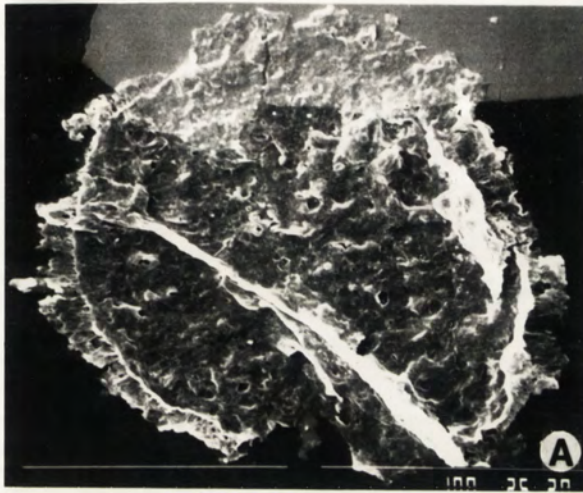


Plate LXXXV

Figs.A-H. *Cymatiosphaeroides ? proceropilum* sp. nov.

- A. 86Z004-4, (12.5 x 112.3).
- B. 87ZW15-5, (18.8 x 122.3).
- C-D. holotype, 87ZW15-5, (9.4 x 119).
- E. 87ZW15-4, (11.5 x 103).
- F-G. 87ZW16-2, (11 x 113).
- H. 87ZW15-2, (7.5 x 115).

All specimens collected from the borehole Rodinga No.4.

The scale bar below F is 44 μ m for D, G; 75 μ m for A; 90 μ m for B, C, E and 150 μ m for F, H.

Plate LXXXV

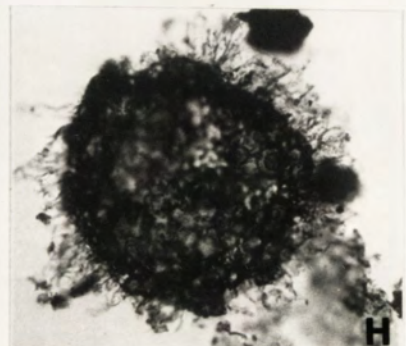
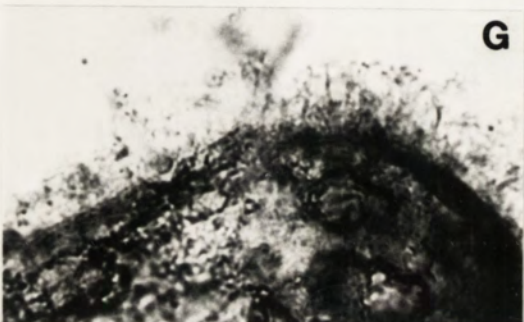
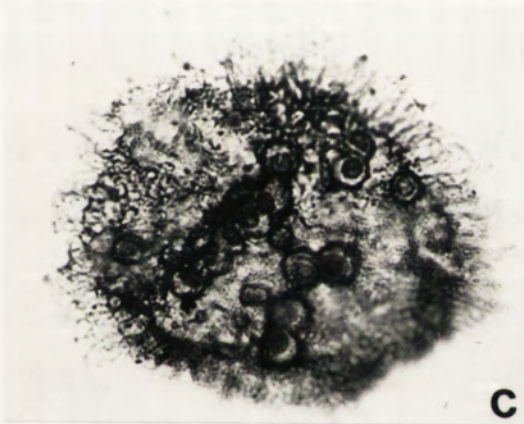
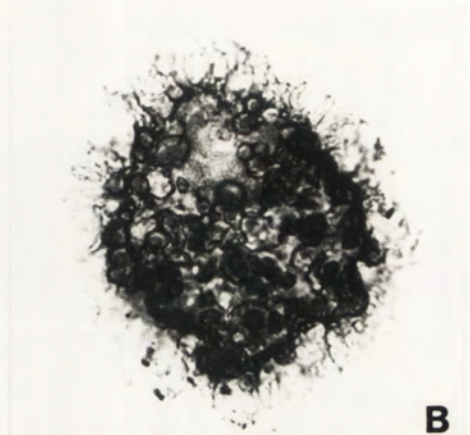
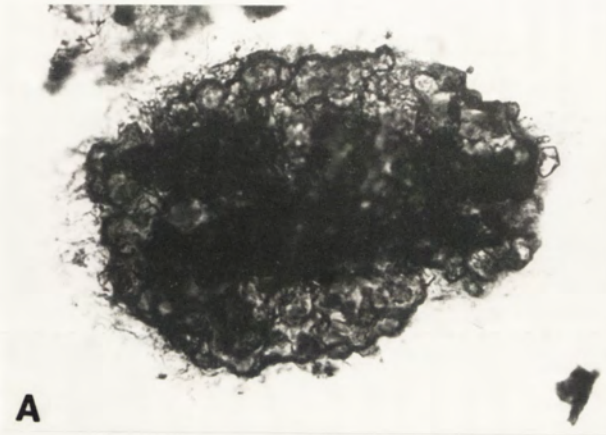


Plate LXXXVI

Figs.A-I. *Cymatiosphaeroides publicopilum* sp. nov.

- A. 86Z004-1, (11.5 x 103.5).
- B-C. 87ZW15-5, (6 x 118).
- D-E. 87ZW15-2, (7.5 x 115).
- F. holotype, 86Z004-2, (8.7 x 100.5).
- G-H. 87ZW15-4, (22 x 111).
- I. 87ZW15-3, (6 x 98.3).

Figs.J-K. *Solisphaeridium* ? sp.
86Z205-1, (19.5 x 118).

The specimens J-K collected from the Ellery Greek section and others from the borehole Rodinga No.4.

The scale bar below C is 37 μ m for K; 44 μ m for C, E; 75 μ m for H, J and 150 μ m for A, B, D, F, G, I.

Plate LXXXVI

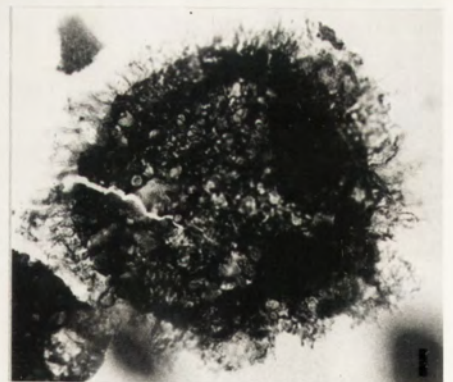
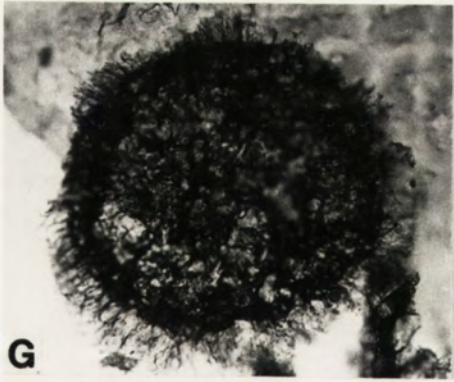
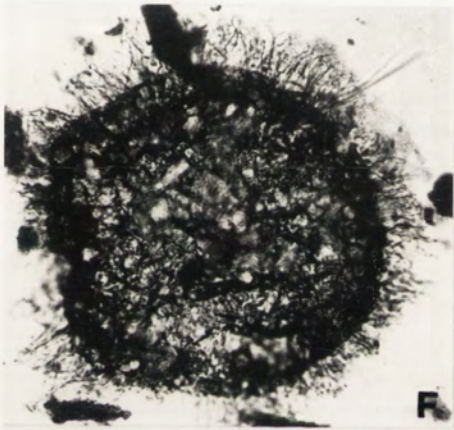
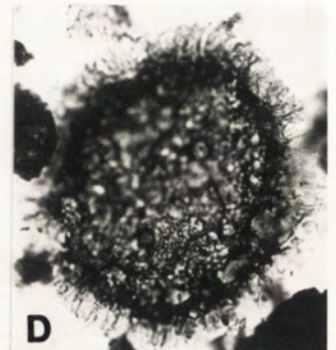
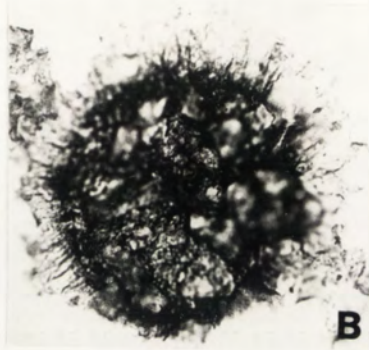
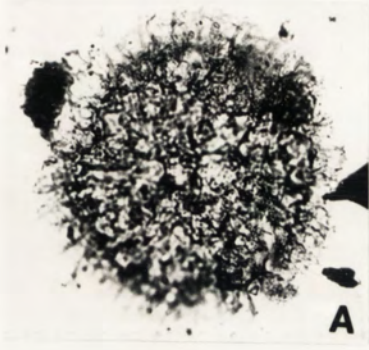


Plate LXXXVII

Figs.A-C, E-H. *Indigestosphaeridium adiakritum* gen. et sp. nov.

A-C. 86Z003.

F-H. 86Z002-6, (10 x 105.8), holotype.

Figs. D-E. *Trachyhystrichosphaera hystricosa* sp. nov.

87ZW17-1, (15 x 109.5).

All specimens collected from the borehole Rodinga No.4.

The scale bars in A are 100 μ m and in B, D, 10 μ m. The bar below G is 44 μ m for E, G, H; 150 μ m for D and 180 μ m for F.

Plate LXXXVII

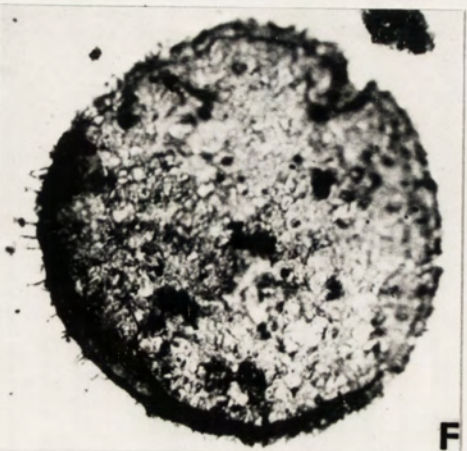
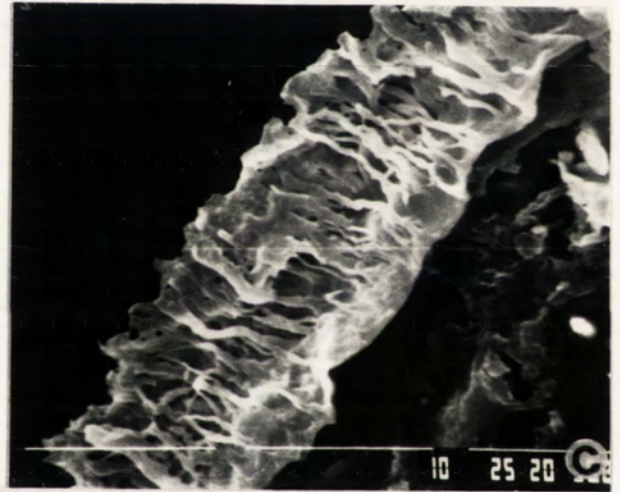
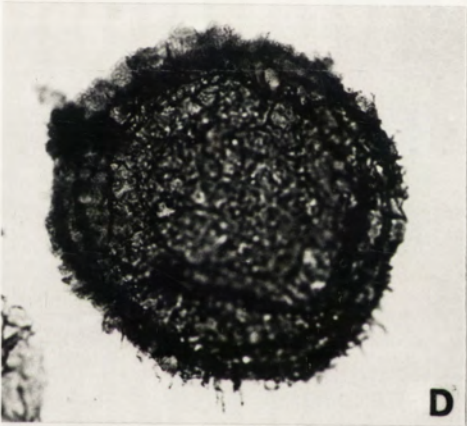


Plate LXXXVIII

- Figs.A-E. *Sticcasphaeridium incertum* gen. et sp. nov.
A. holotype, 87ZW01-4, (7.6 x 100.3).
B-C. 86Z003.
D. 86Z003.
E. 87ZW01.

- Figs.F-G. *Indigestosphaeridium adiakritum* gen. et sp. nov.
F. 87ZW02-1, (14 x 96).
G. 86Z002-10, (9 x 100).

- Figs.H-I. *Octoedryxium truncatum* (Rudavskaja) Vidal, 1976
H. 87ZW09-1, (7 x 104).
I. 86Z007-1, (20 x 100.4).

All specimens collected from the borehole Rodinga No.4.

The scale bars in B, D, E are 100 μ m and in C, 10 μ m. The bars below G are 18 μ m for H, I; 45 μ m for A and 75 μ m for F, G.

Plate LXXXVIII

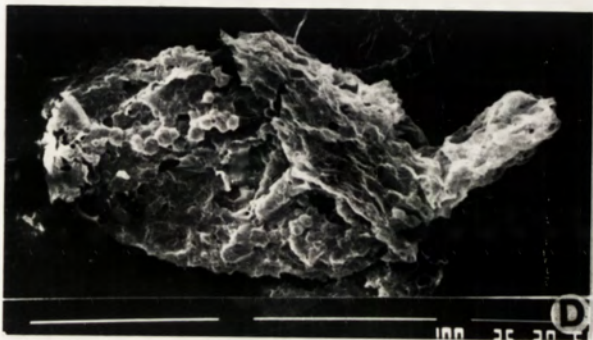
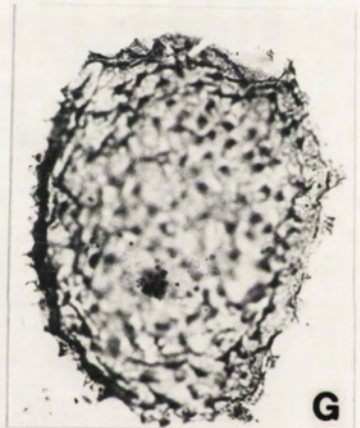
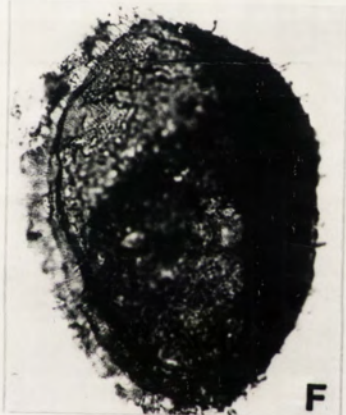
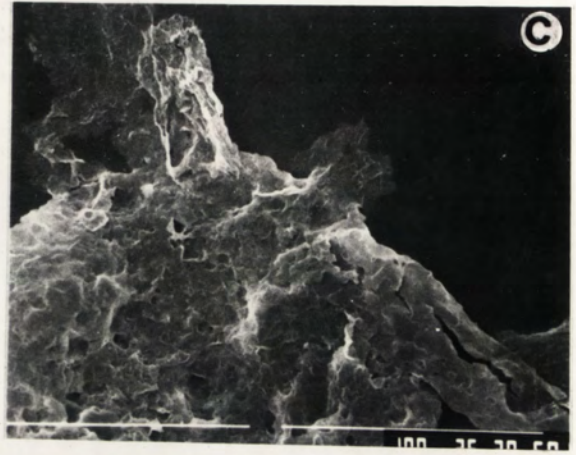


Plate LXXXIX

Figs.A-F. *Monosozosphaeridium ekmelum* gen. et sp. nov.

- A. 87ZW10.
- B. holotype, 86Z016-1, (12.3 x 98.7).
- C. 87ZW02-3, (5.5 x 115.7).
- D. 86Z002-6, (3.8 x 107.8).
- E. 86Z386-4, (11.5 x 97).
- F. 87ZW08.

Figs.G-H. *Octoedryxium truncatum* (Rudavskaja) Vidal, 1976

- G. 86Z007-2, (5.3 x 98.2).
- H. 86Z007-2, (14 x 109).

Fig.I. *Monosozosphaeridium* ? sp.
87ZW15.

The specimens B, E collected from the borehole Ooraminna No.1 and others from Rodinga No.4.

The scale bars in A, F, I are 100 μ m. The bars below C are 18 μ m for G, H; 45 μ m for B; 75 μ m for D, E, and 90 μ m for C.

Plate LXXXIX

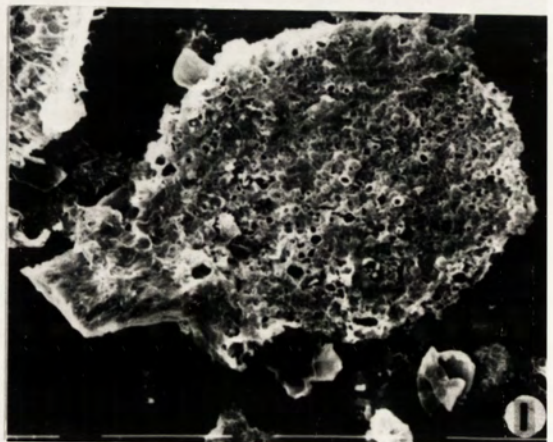
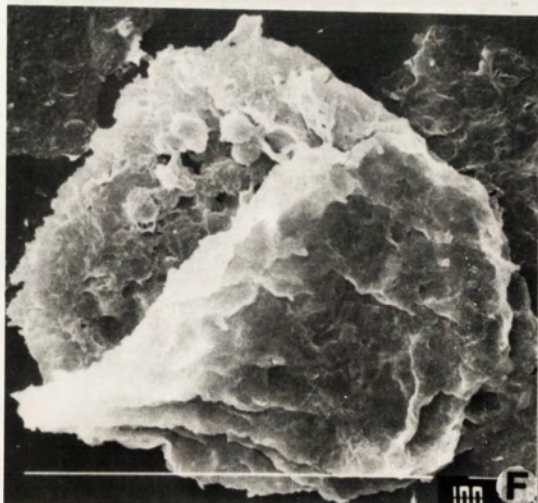
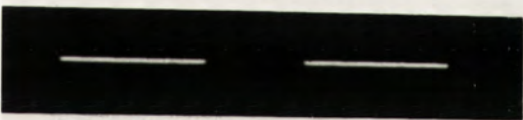
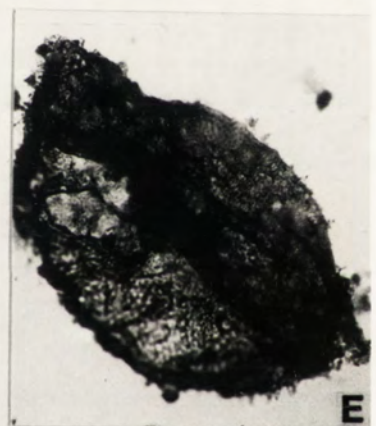
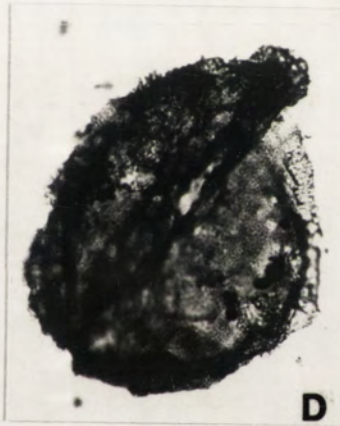
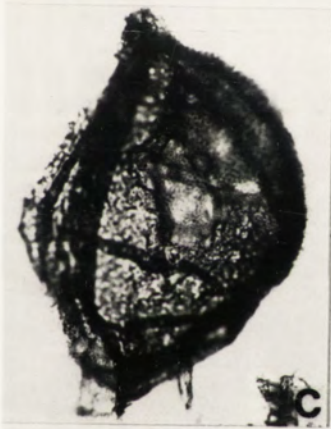
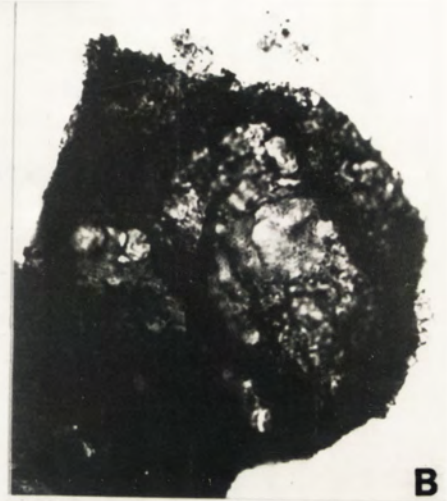
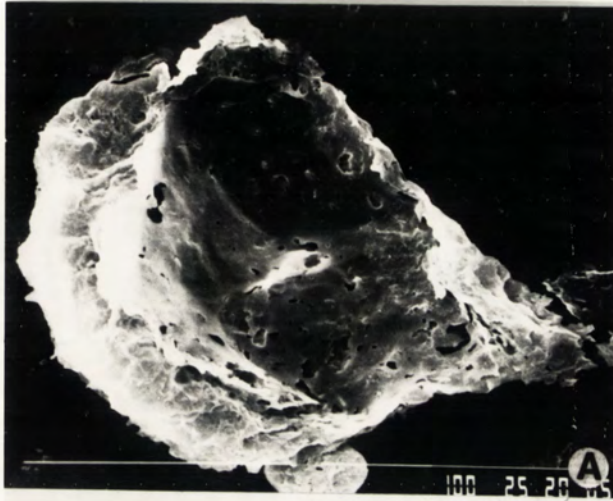


Plate XC

Figs.A-F. *Trachysphaeridium anelpum* gen. et sp. nov.

- A. 87ZW15-1, (4 x 111.4), holotype.
- B. 87ZW15.
- C. 86Z386-4, (16 X 111.5).
- D. 87ZW11.
- E. 87ZW01-2, (14 X 111).

Fig.F. Unnamed specimen C.
87ZW18.

The specimen C collected from the borehole Ooraminna No.1 and others from Rodinga No.4.

The scale bars in B, D are 100 μ m. The bars below D are 75 μ m for C and 90 μ m for A, E, F.

Plate XC

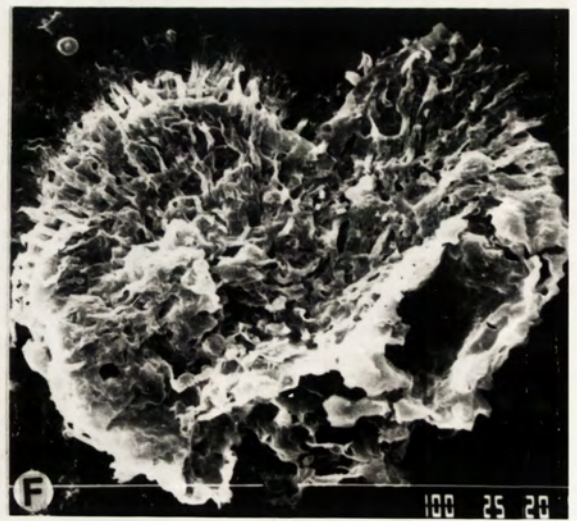
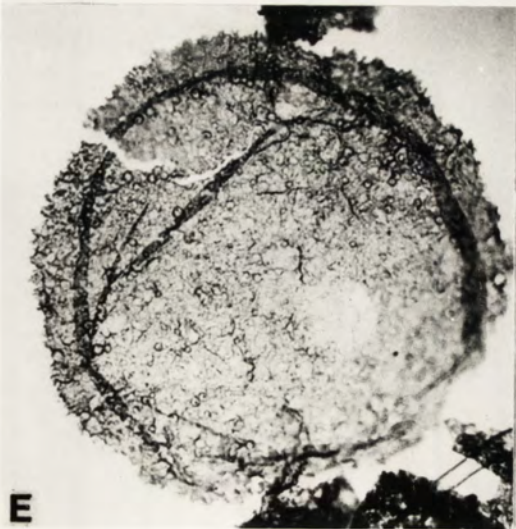
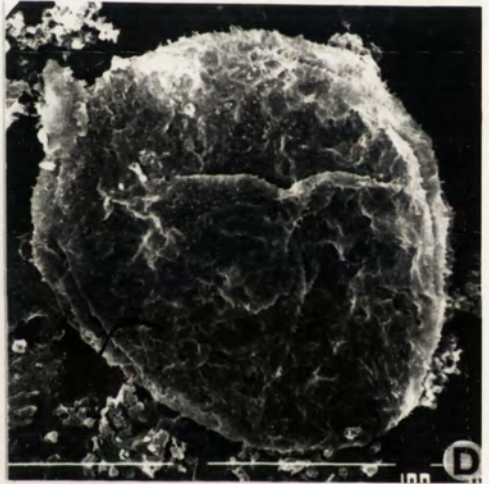
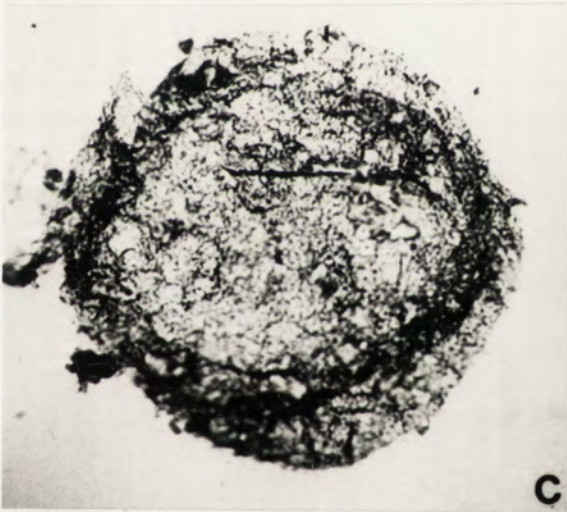
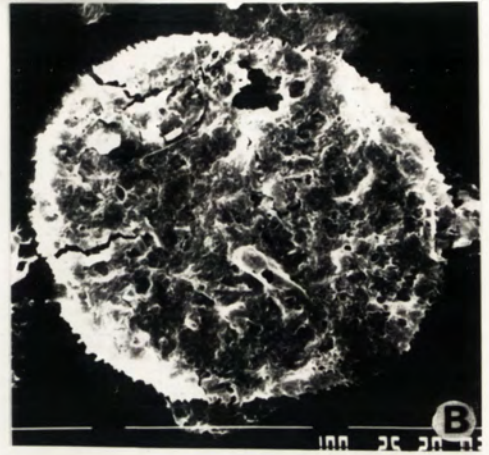
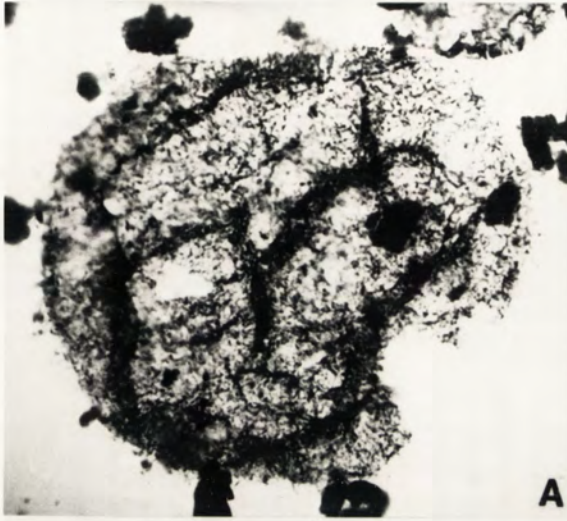


Plate XCI

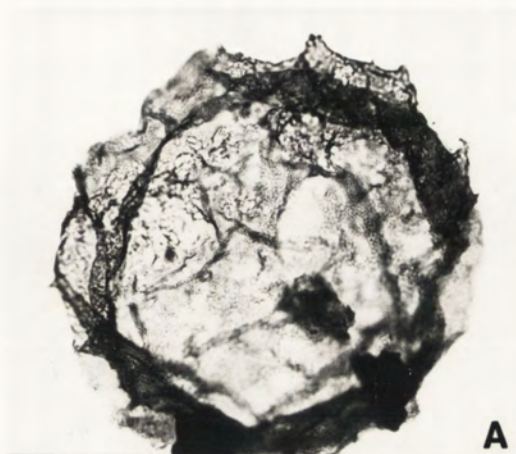
Figs.A-G. *Polyhedrosphaeridium echinatum* gen. et sp. nov.

- A-B. holotype, 87ZW09-1, (8.7 x 111).
- C. 87ZW02-3, (10.1 X 103.7).
- D. 87ZW01-1, (10.5 X 109).
- E-F. 87ZW02-1, (20.5 X 99.5).
- G. 87ZW01.

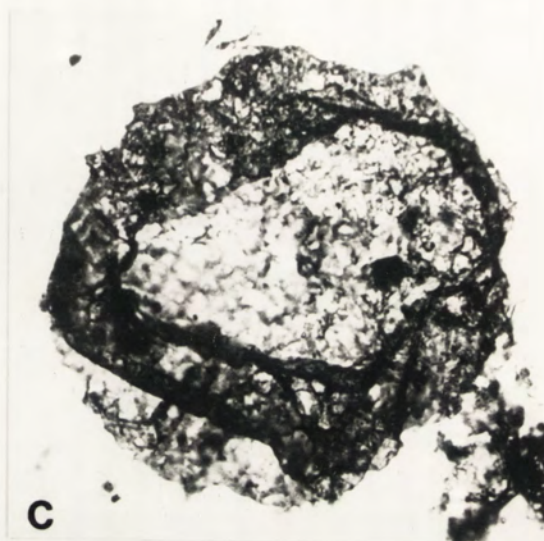
All specimens collected from the borehole Rodinga No.4.

The scale bars in G are 100 μ m. The bars below E are 22 μ m for B, F; 75 μ m for A and 90 μ m for C, D, E.

Plate XCI



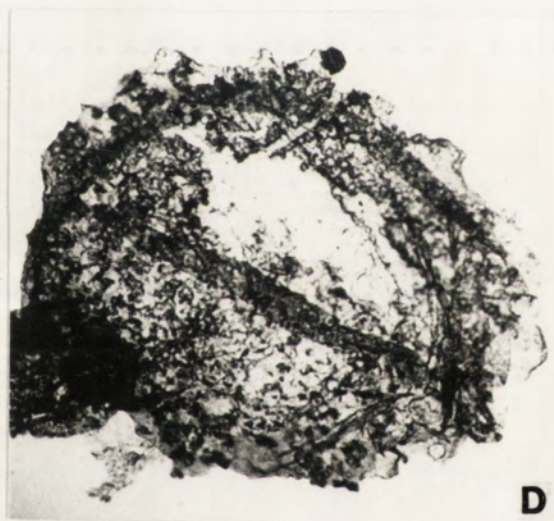
A



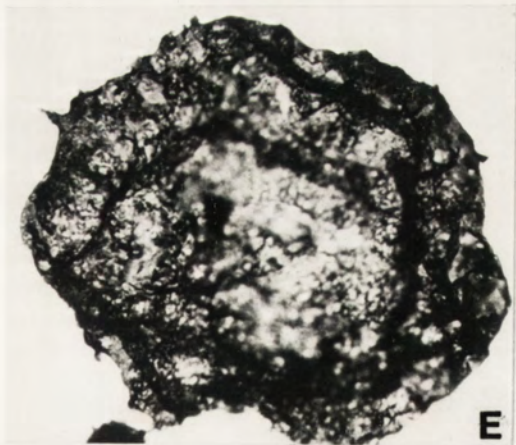
C



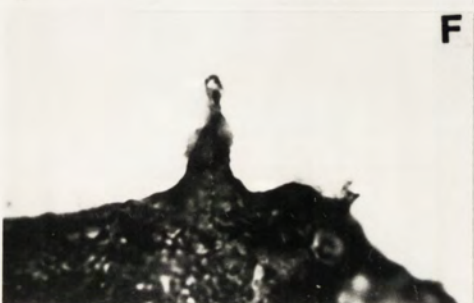
B



D



E



F



100 

Plate XCII

Figs. A-D. *Schizofusa* sp.

- A. 87ZW16.
- B. 87ZW11.
- C. 87ZW01-1, (19 X 96).
- D. 87ZW11.

Figs. E-I. *Schizofusa rodingia* sp. nov.

- E. 87ZW01-1, (12.5 X 104.7).
- F. holotype, 87ZW01-1, (20 X 110.2).
- G. 87ZW01-6, (15 X 99).
- H. 87ZW17.
- I.? 86Z002-5, (2.6 X 111).

All specimens collected from the borehole Rodinga No.4.

The scale bars in A. B. D. H are 100 μ m. The bar below D is 150 μ m for other specimens.

Plate XCII

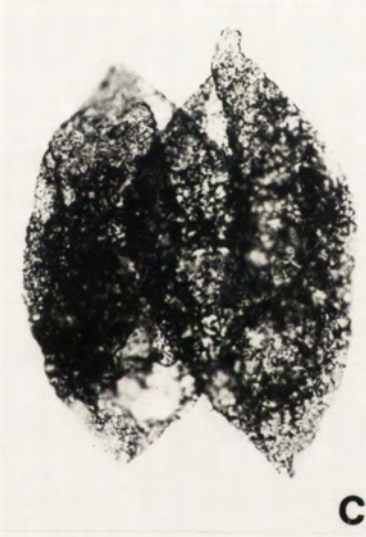
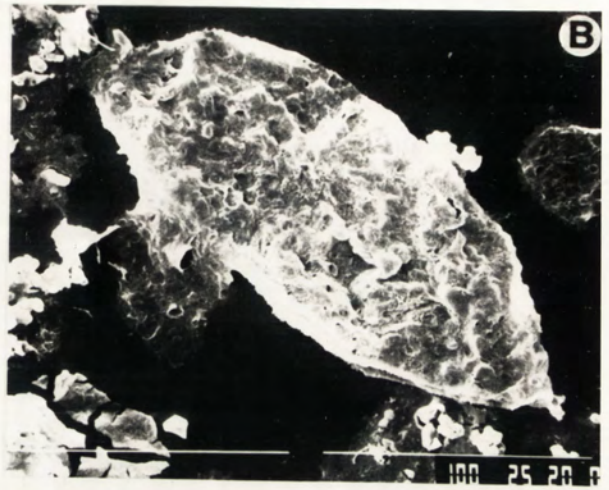
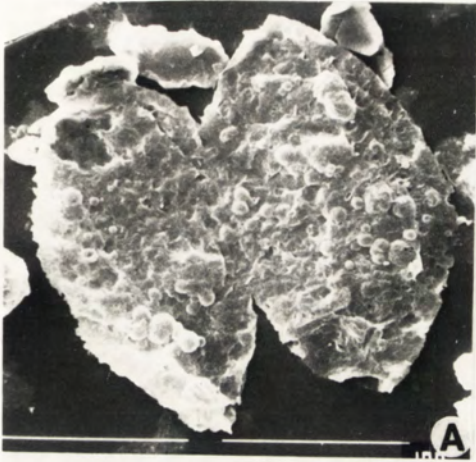


Plate XCIII

- Figs.A-F. *Dictyotidium ambonum* sp. nov.
A-B. holotype, 87ZW01-3, (18.5 x 109).
C. 87ZW01-4, (11 X 101.3).
D. 87ZW01.
E. 87ZW01-1, (10 X 89).
F. 87ZW01-4, (21.8 X 102).

- Figs.G-J. *Tasmanites? fistulosum* sp. nov.
G-H. 86Z018-1, (9 X 109).
I-J. holotype, 87ZW02-1, (7 X 115.7).

The specimens G-H collected from the borehole Ooraminna No.1 and others from Rodinga No.4.

The scale bar in D is 100 μ m. The bars below B are 18 μ m for H, J; 22 μ m for B, C, E; 37 μ m for A, F and 75 μ m for G, I.

Plate XCIII

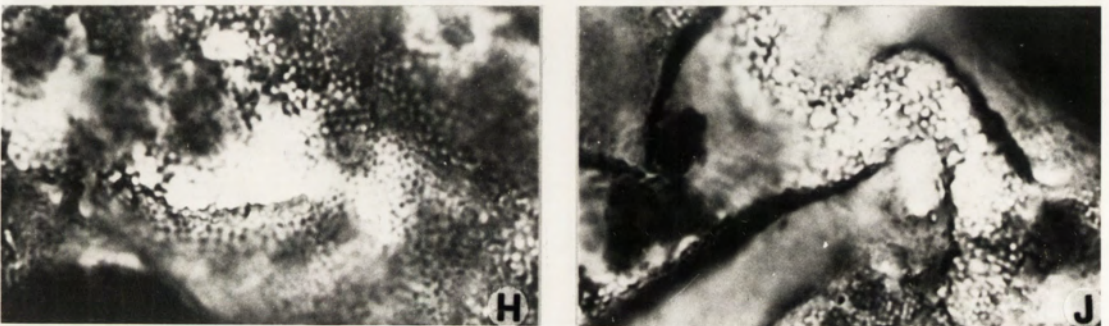
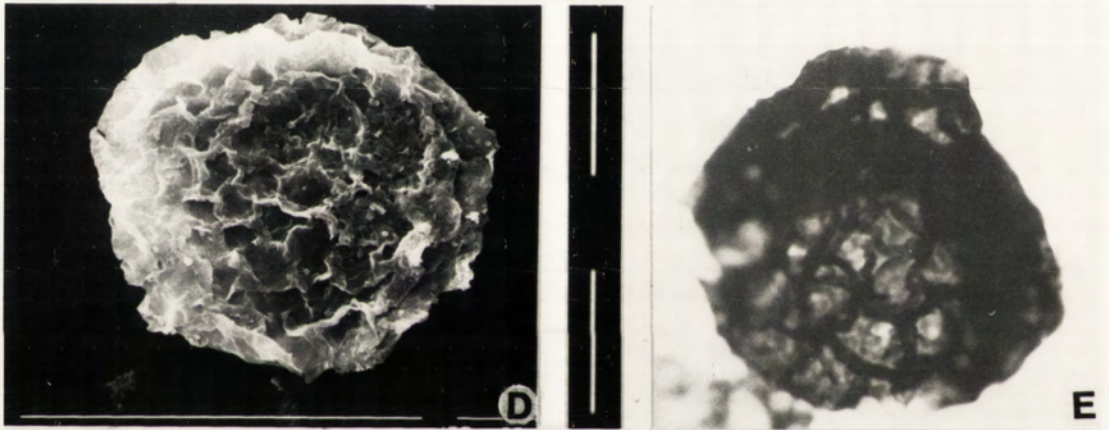
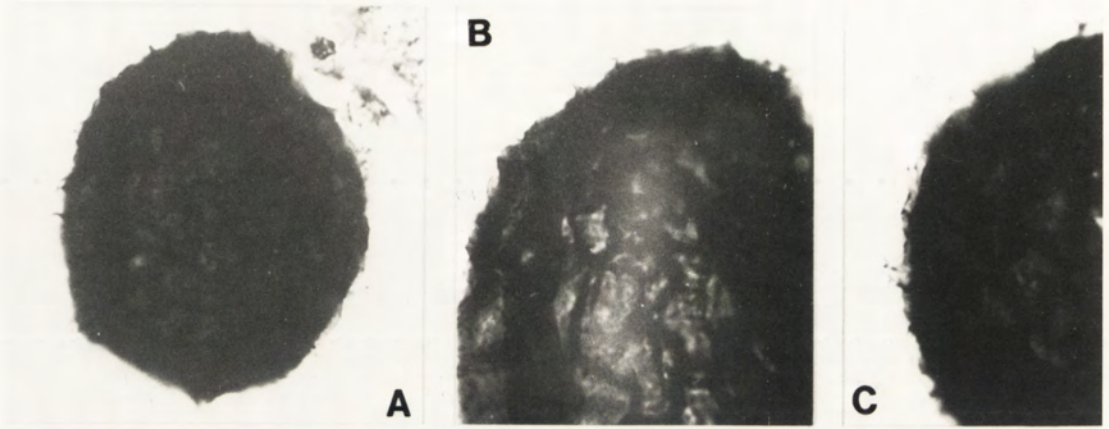


Plate XCIV

- Figs.A-E. *Dictyotidium ambonum* sp. nov.
A-C. Three focus levels, 86Z004-2, (20 x 98.2).
D-E. 86Z003.
- Figs.F-G. *Pterospermopsimorpha spongia* sp. nov.
F. 86Z022-2, (4.6 x 99.5).
G. 86Z022-3, (10 x 117.1).
- Figs.H-I. *Dasysphaeridium trichotum* gen. et sp. nov.
H. 86Z018-8, (14 x 100), paratype.
I. 86Z018-9, (15 x 115.2).
- Fig.J. *Dictyotidium* sp.
86Z388-1, (10.5 x 101).
- Fig.K. *Dictyotidium?* sp.
86Z386.

The specimens A-E collected from the borehole Rodinga No.4 and others from Ooraminna No.1.

The scale bars in K are 100 μ m. The bar below B is 24 μ m for E, 36 μ m for F, G, H, I; 44 μ m for J; 65 μ m for D and 75 μ m for A-C.

Plate XCIV

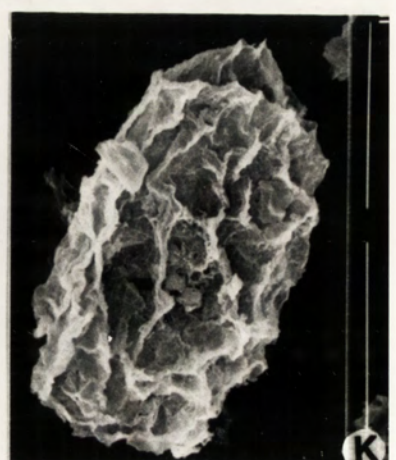
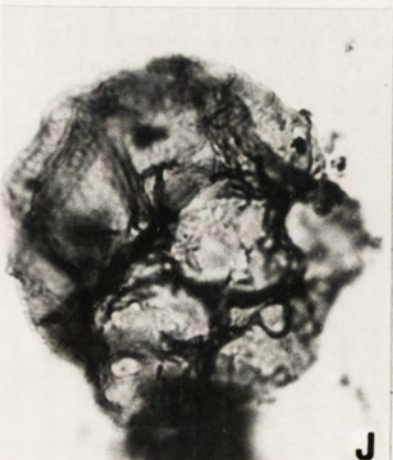
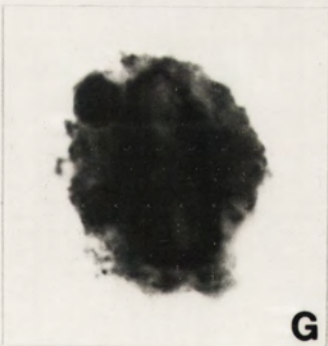
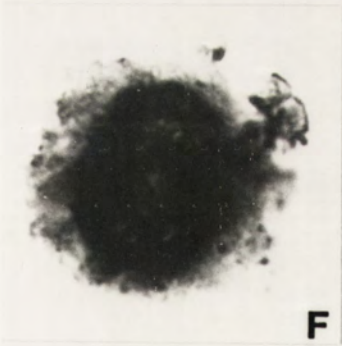
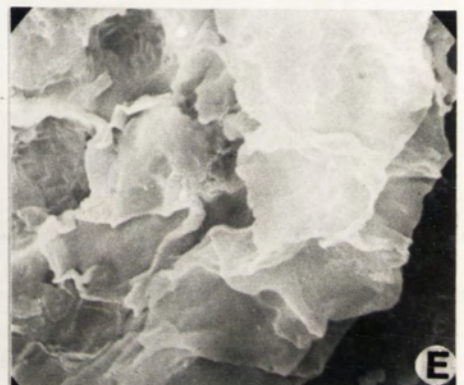
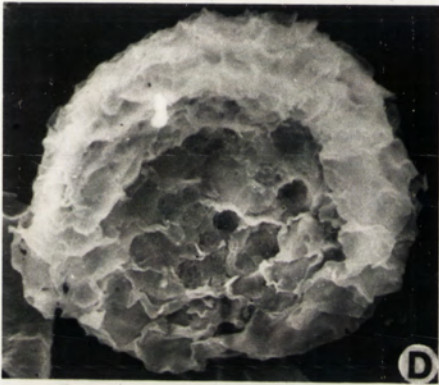
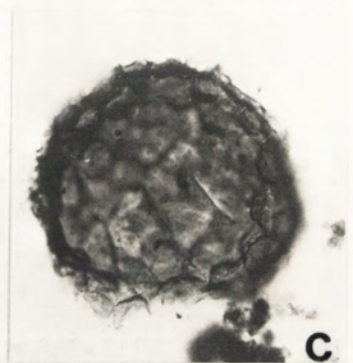
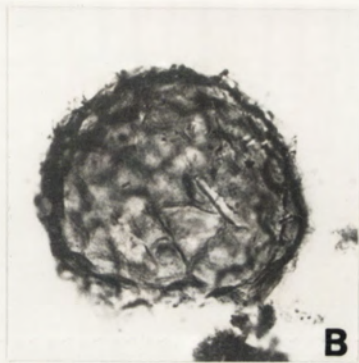
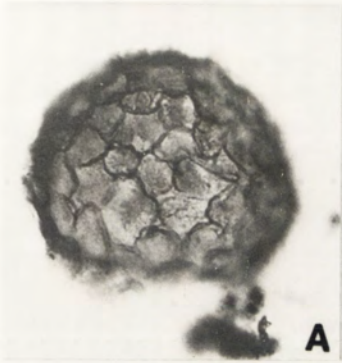


Plate XCV

Figs.A-B. Unnamed specimen D.
87ZW16.

Figs.C-D. Unnamed specimens E.
C. 87ZW16.
D. 87ZW17.

Figs.E-F. *Rhopaliophora* ? sp.
E. 87ZW11.
F. 87ZW01-7, (19.1 x 110.5).

Fig.G. Unnamed specimen F.
87ZW16.

All specimens collected from the borehole Rodinga No.4.

The scale bars in A, C, D, E are 100 μ m and in B, G, 10 μ m. The bars below E are 37 μ m for F.

Plate XCV

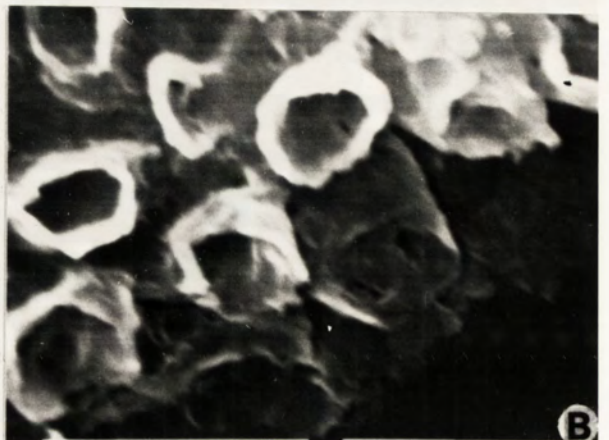
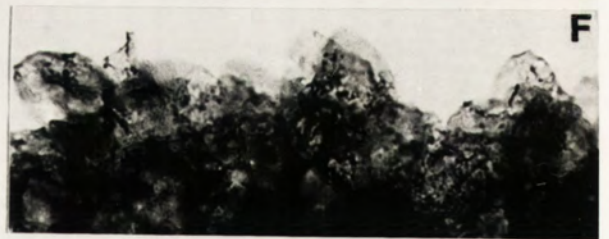
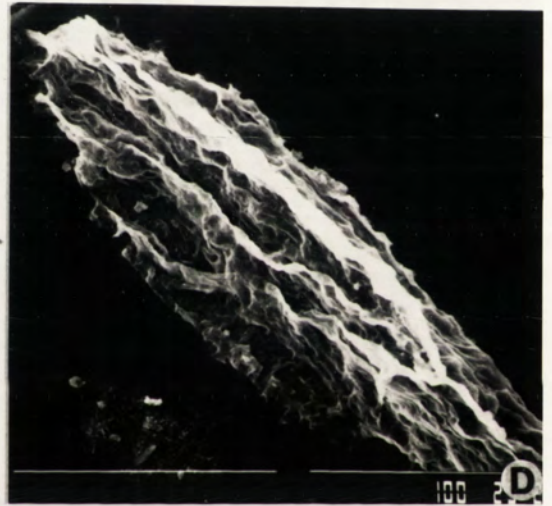
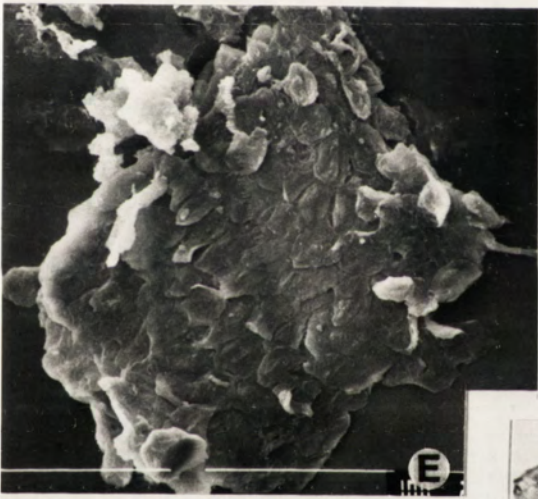
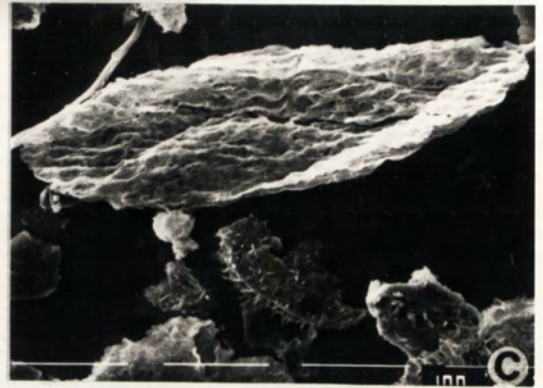
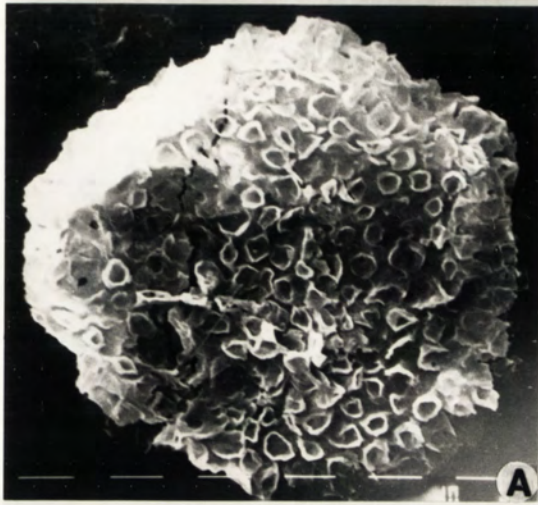


Plate XCVI

- Figs.A-B. *Melanocyrrillium* sp.
A. 87ZW08.
B. 86Z018-9, (6.5 X 106.5).
- Figs.C-G. *Sinianella uniplicata* (Yin) emend.
C. 87ZW11.
D. 87ZW16-1, (11.5 X 100.5).
E. 87ZW11-1, (6.4 X 103.8).
F. 86Z017-1, (2.8 X 108).
G. 86Z002-3, (18.1 X 117.8).
- Fig.H. *Sinianella scabrata* sp. nov.
87ZW08.
- Fig.I. Vase-shaped specimen
87ZW01.

The specimens B, F collected from the borehole Ooraminna No.1 and others from Rodinga No.4.

The scale bars in A, C, H, I are 100 μ m. The bar below C is 44 μ m for D, E; 75 μ m for B; 90 μ m for F and 150 μ m for G.

Plate XCVI

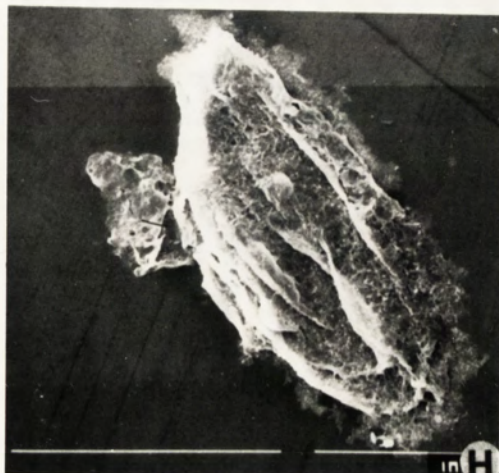
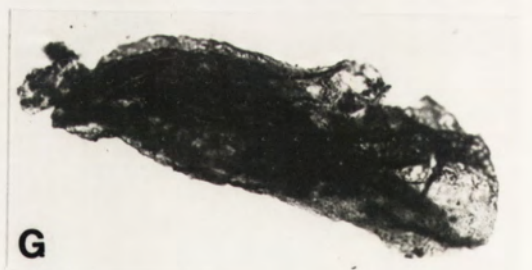
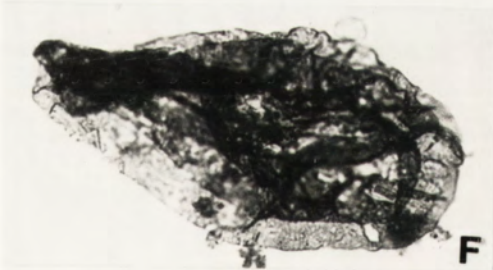
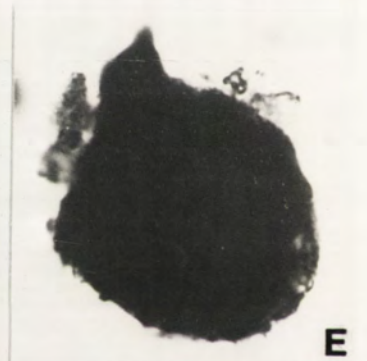
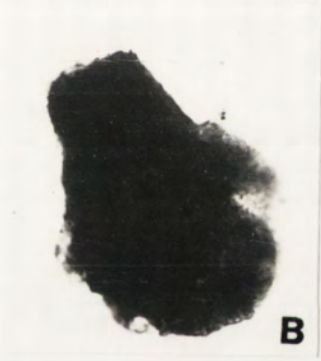
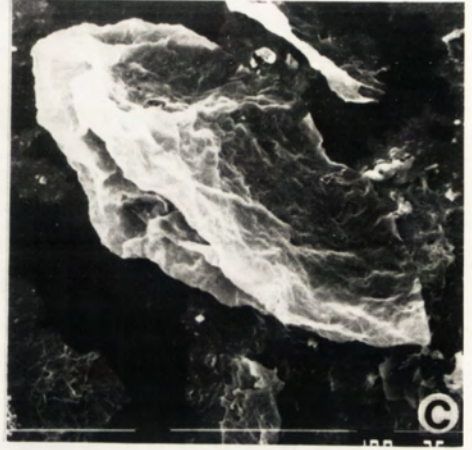
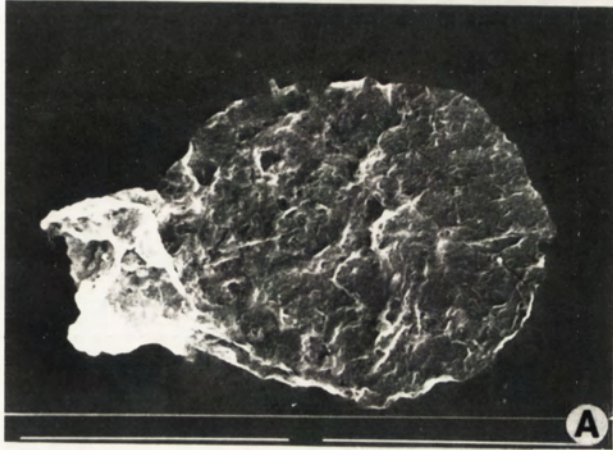


Plate XCVII

- Figs.A-G. *Palaeovolvax ooraminnus* gen. et sp. nov.
A-B. holotype, 86Z018-3, (8 x 102).
C. 86Z016-3, (17.8 X 107.5).
D. 86Z018.
E. 86Z388-1, (15 X 102).
F. 86Z388-1, (9.5 X 116).
G. 86Z018-11, (8.5 X 99).

- Figs.H-J. *Pyritosphaera barbaria* Love, 1957
H. 86Z018.
I. 86Z388-1, (5.1 X 101).
J. 86Z018-6, (21 X 112.2).

All specimens collected from the borehole Ooraminna No.1.

The scale bars in H are 10 μ m. The bar below C is 36 μ m for B, I, J; 90 μ m for C; 150 μ m for A, E, F, G and 180 μ m for D.

Plate XCVII

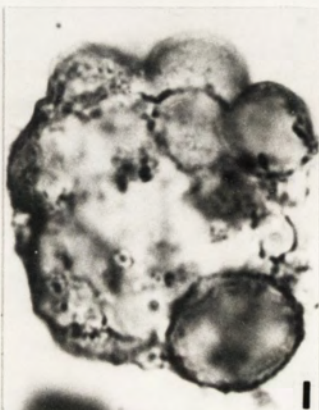
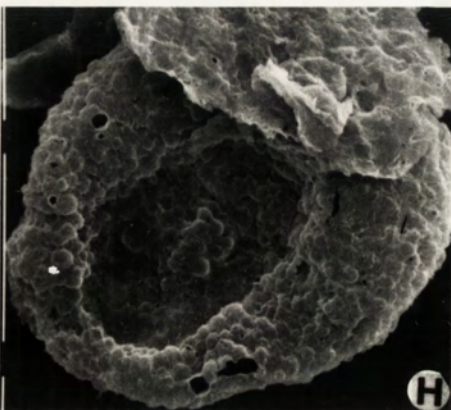
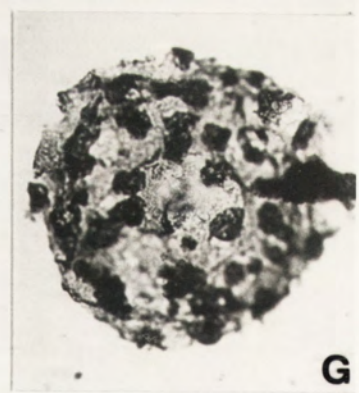
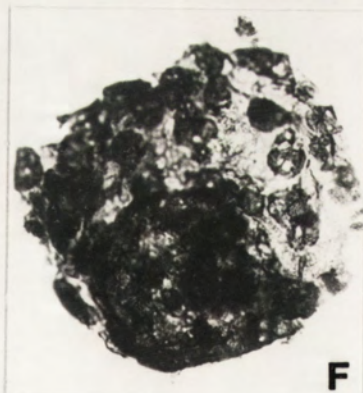
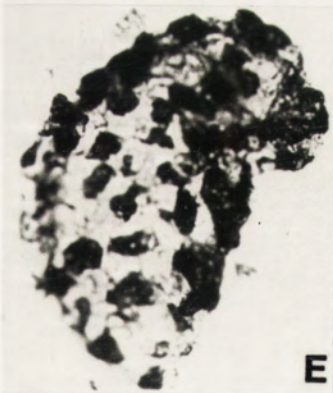
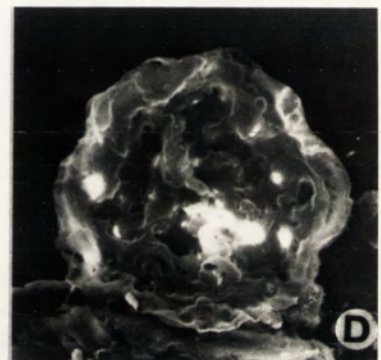
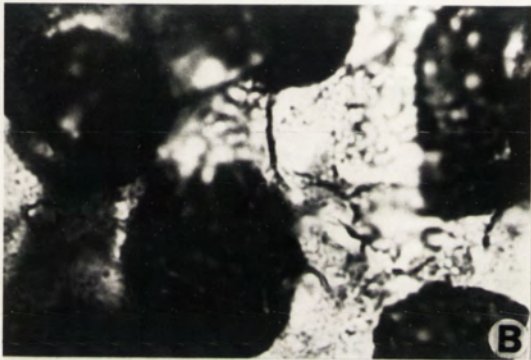
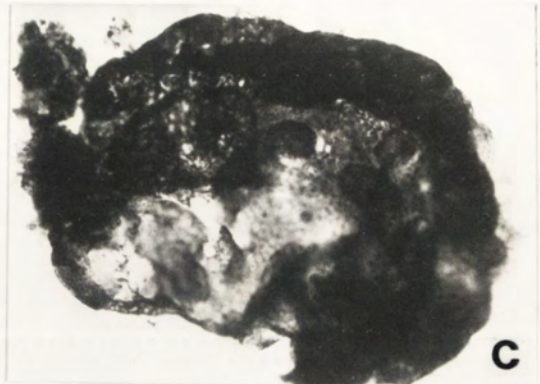
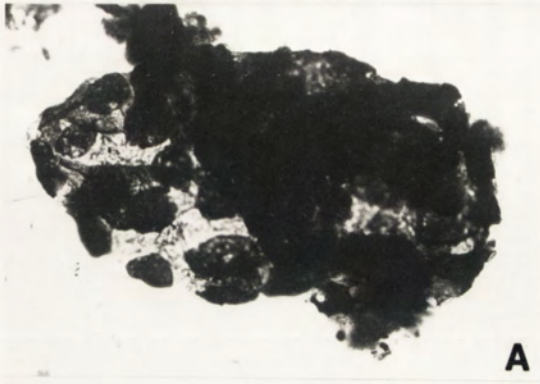


Plate XCVIII

- Figs.A-K. *Askosphaeridium ediacarium* gen. et sp. nov.
A-C. Three focus levels, holotype.
87ZW08-3, (10.5 X 109).
D. 87ZW08-4, (8.8 X 116.6).
E. 87ZW19-3, (3 X 105).
F. 87ZW16-3, (7.5 X 109.5).
G-H. 86Z005-2, (16.1 X 111).
I-J. 87ZW08-4, (9 X 100).
K. 87ZW08-4, (9.5 X 100).

All specimens collected from the borehole Rodinga No.4.

The scale bars below I are 9 μ m for H, I, J; 11 μ m for A-C, E, K; 18 μ m for D, G and 37 μ m for F.

Plate XCVIII

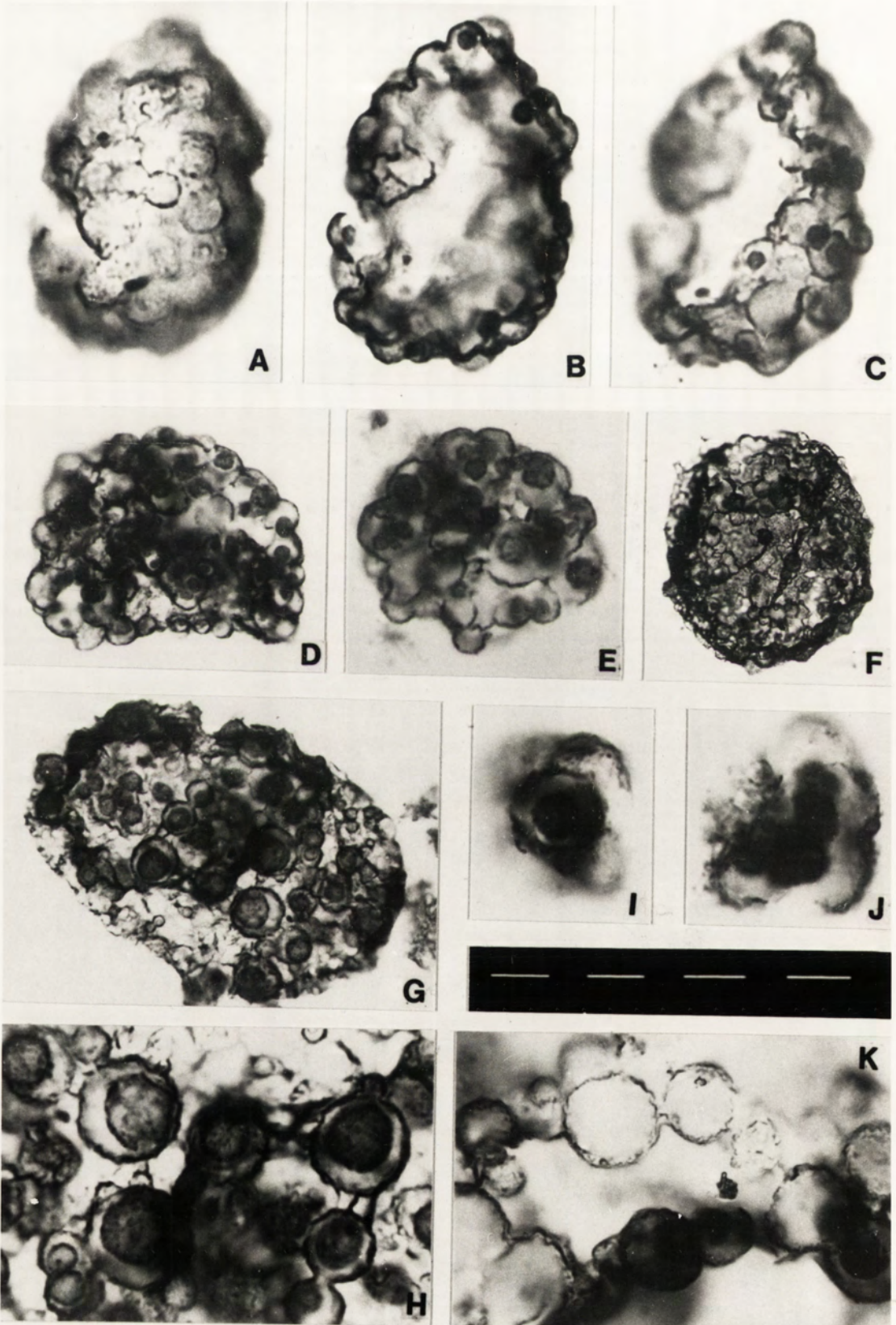


Plate IC

- Figs.A-L. *Pyritosphaera pertatatakia* sp. nov.
- A. holotype, 86Z022-1, (15 X 105.2).
 - B. 86Z022-1, (9.4 X 103.8).
 - C. 86Z022-3, (8.8 X 116.5).
 - D. 86Z022-2, (10.5 X 110.5).
 - E. 86Z022-1, (19 X 102.6).
 - F. 86Z018-9, (19 X 107.5).
 - G. 86Z022-1, (14.5 X 116).
 - H. 86Z022-1, (8.9 X 115.5).
 - I. 86Z022-1, (8.5 X 115.5).
 - J. 86Z003.
 - K. 86Z227-1.
 - L. 86Z003.

The specimens J, L collected from the borehole Rodinga No.4 and others from Ooraminna No.1.

The scale bars in L are 10 μ m. The bar below H is 18 μ m for B, F, G, H, K; 22 μ m for D, E, I; 37 μ m for A, C, and 70 μ m for J.

Plate IC

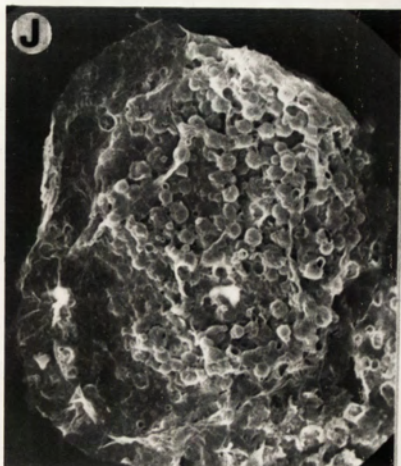
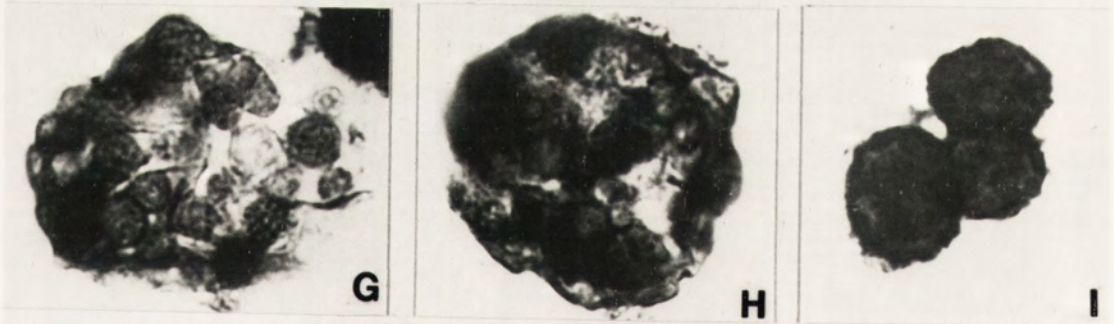
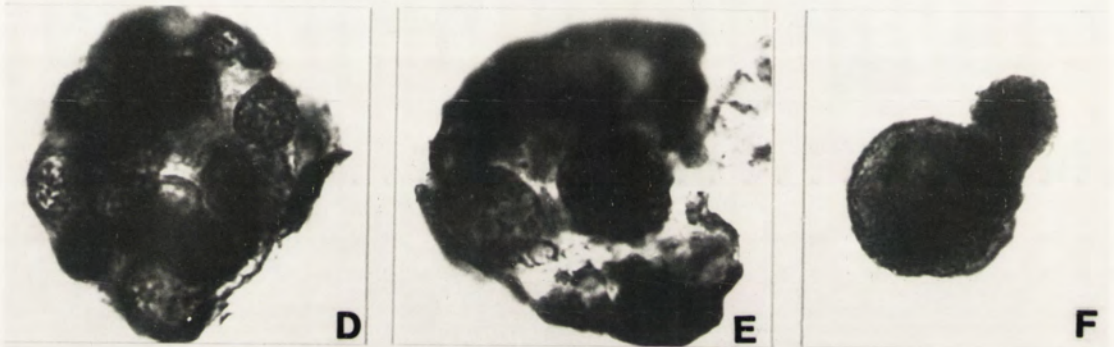
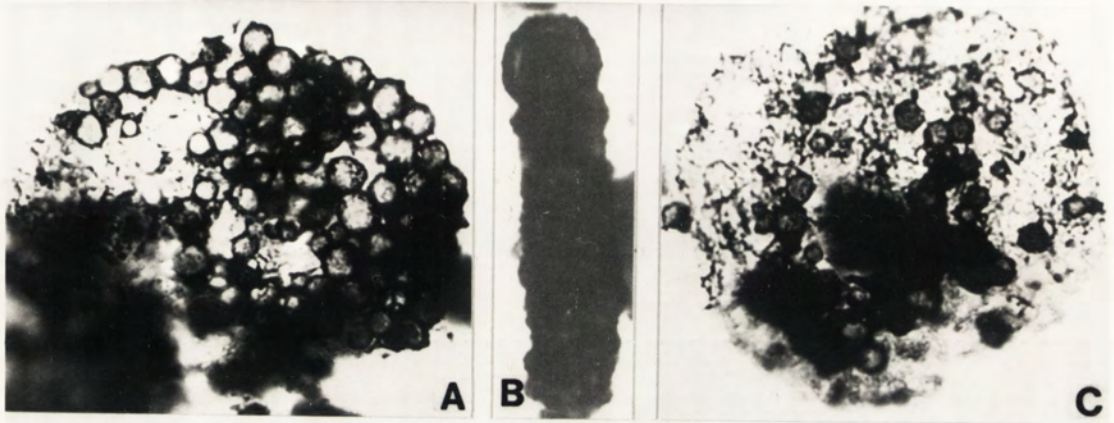


Plate C

Figs.A-I. *Pyritosphaera pertatatakia* sp. nov.

- A. 86Z022-2, (22 X 100.5).
- B. 86Z022-1, (12.5 X 103.5).
- C. 86Z022-1, (18.3 X 123.5).
- D. 86Z022-3, (18 X 107).
- E. 86Z022-3, (17 X 104.6).
- F. 86Z022-1, (11.6 X 102.5).
- G. 86Z022-2, (7.8 X 94.9).
- H. 86Z022-2, (13.3 X 112).
- I. 86Z022-1, (22.5 X 118).

Figs.J-K. *Askosphaeridium ediacarium* gen et sp. nov.

- J. 87ZW01-1, (5 X 96.5).
- K. 86Z005-4, (9.8 X 110).

The specimens J-K collected from the borehole Rodinga No.4 and others from Ooraminna No.1.

The scale bar below H is 36 μ m for G; 44 μ m for A, F; 75 μ m for B, C, H, I; 90 μ m for D, E, K and 150 μ m for J.

Plate C

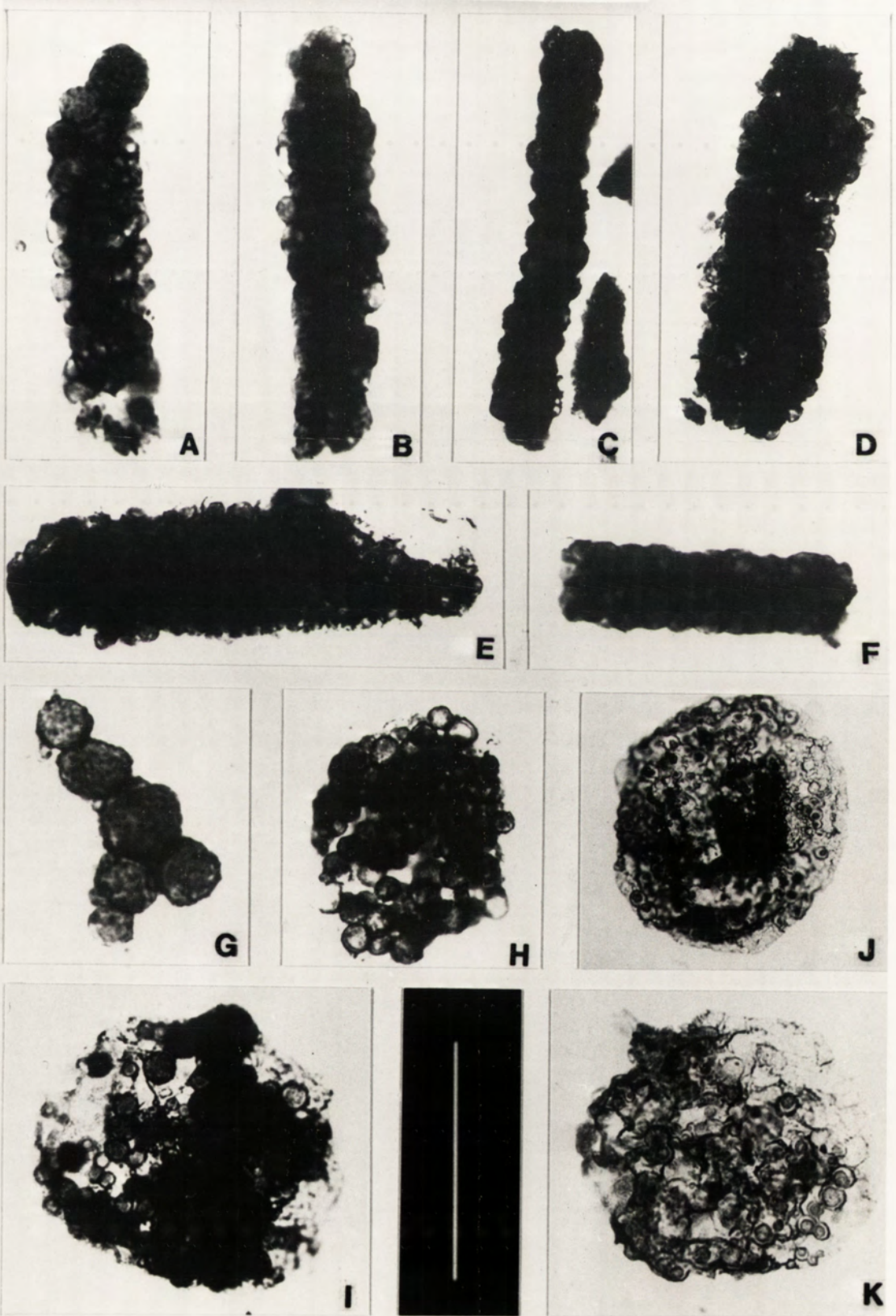


Plate CI

Fis.A. *Leiosphaeridia asperata* (Naumova) Lindgren, 1982
86Z018-9, (3.8 x 102.4).

Figs.B-E. *Kildinosphaera chagrinata* Vidal, 1983

B. 86Z002-5, (6.5 x 107.9)

C. 86Z018.

D. 86Z018-9, (10 x 104).

E. 87ZW01-4, (8 x 120).

Figs.F-H. *Kildinosphaera granulata* Vidal, 1983

F. 86Z003.

G. 86Z007-2, (13.5 X 118).

H. 86Z017-2, (21 X 110).

Fig.I. *Kildinosphaera verrulata* Vidal, 1983
87ZW01.

The specimens A, C, D, H collected from the borehole Ooraminna No.1 and others from Rodinga No.4.

The scale bars in F, I are 100 μ m. The bar below B is 44 μ m for A; 75 μ m for H; 90 μ m for E, G; 150 μ m for B, D and 180 μ m for C.

Plate CI

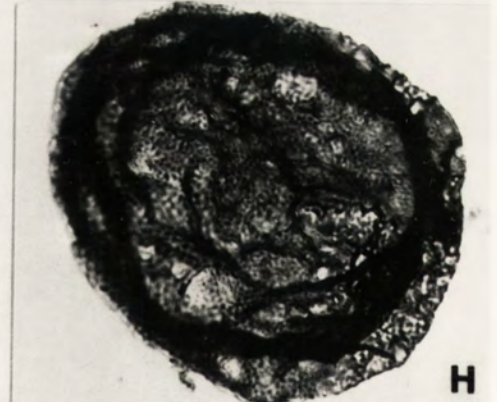
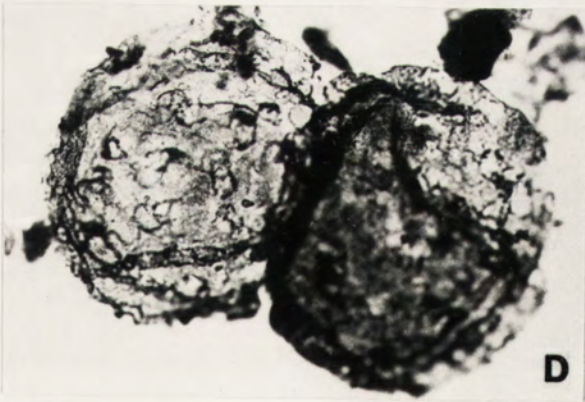
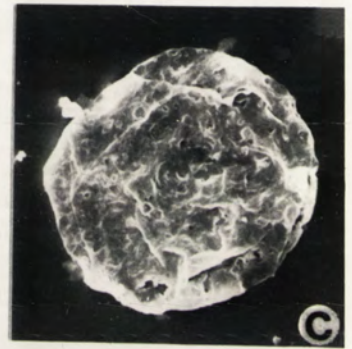
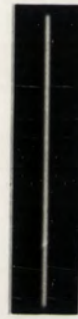
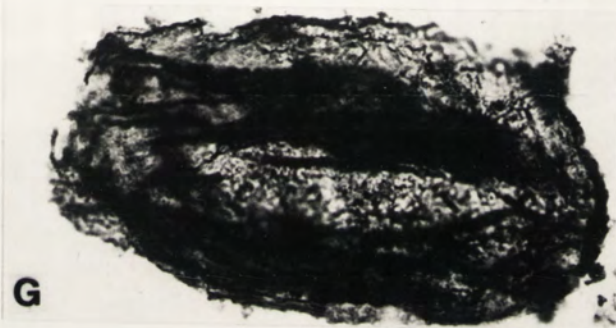
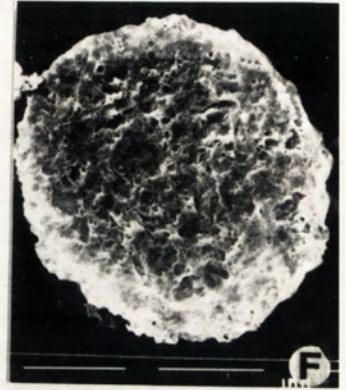
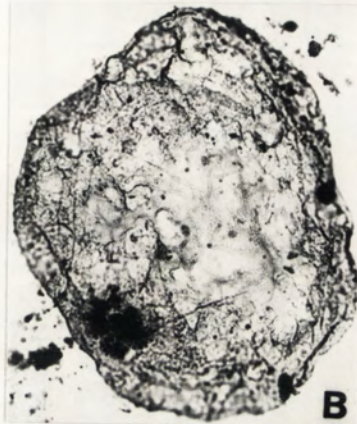


Plate CII

- Figs.A-B. *Protoleiosphaeridium flexuosum* (Timofeev, 1966) comb.
A. 87ZW07.
B. 87ZW15.
- Fig.C. Unknown specimen.
87ZW01.
- Fig.D. *Synsphaeridium* sp.
87ZW01-8, (14 x 115).
- Fig.E. Unknown specimen.
87ZW09-1, (12.2 x 113.5)
- Fig.F. *Lophosphaeridium* sp.
86Z018-9, (17 x 115).
- Figs.G-H. *Trachysphaeridium* sp.
G. 86Z017-2, (18 x 115).
H. 86Z386-2, (17.3 x 115)
- Fig.I. *Stictosphaeridium* sp.
87ZW15-2, (9 x 101.5).
- Fig.J. *Kildinosphaeria granulata* Vidal, 1983
87ZW01-4, (18 x 98).

The specimens F, G, H collected from the borehole Ooraminna No.1 and others from Rodinga No.4.

The scale bars in A, B, are 10 μ m and in C, 100 μ m. The bar below F is 44 μ m for F, H, I; 75 μ m for D, G, and 150 μ m for E, J.

Plate CII

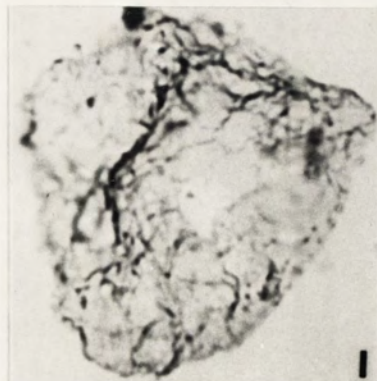
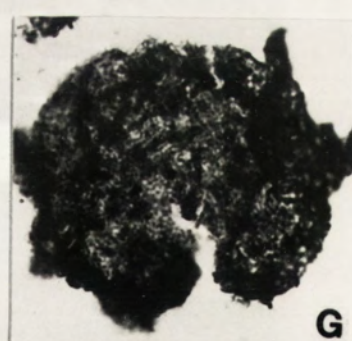
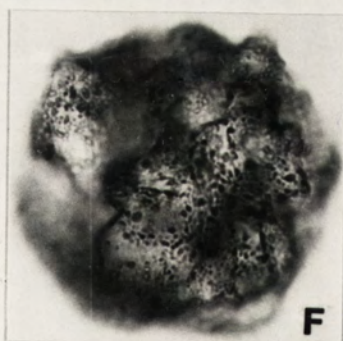
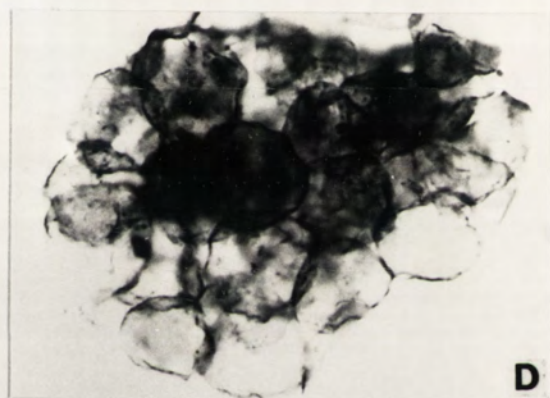
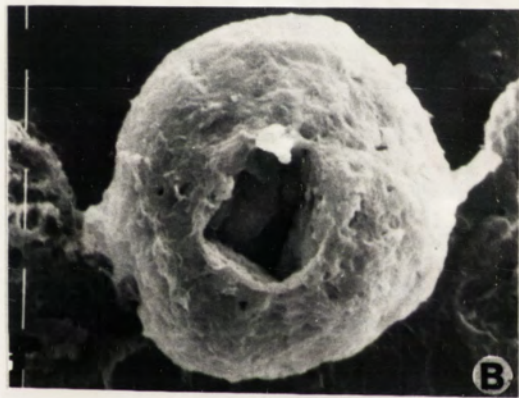
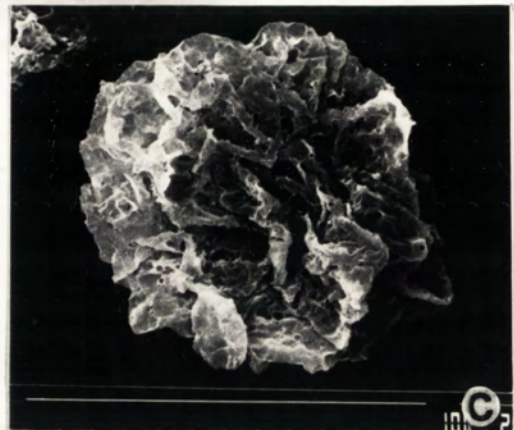


Plate CIII

- Fig.A. *Siphonophycus* ? sp.
86Z018-11, (15.5 x 102.5).
- Figs.B-D. *Eomycetopsis robusta* (Schopf) Knoll et Golubic, 1979
B. 87ZW01-4, (8 X 100).
C. 87ZW01-5, (14.5 X 109).
D. 87ZW01-1, (14 X 123.8).
- Fig.E. *Siphonophycus* sp. B.
87ZW01-1, (11 x 103).
- Fig.F. *Oscillatoriopsis* sp.
87ZW01-8, (18.5 x 112).
- Figs.G-H. *Obruchevella* sp. B.
Two focus levels, 86Z005-2, (13 x 94.2).

The specimens A collected from the borehole Ooraminna No.1 and others from Rodinga No.4.

The scale bar below C is 37 μ m for C, G, H; 75 μ m for A, B, D and 90 μ m for E, F.

Plate CIII

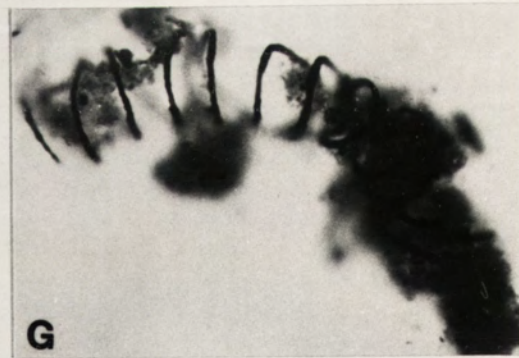
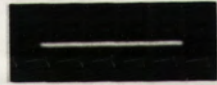
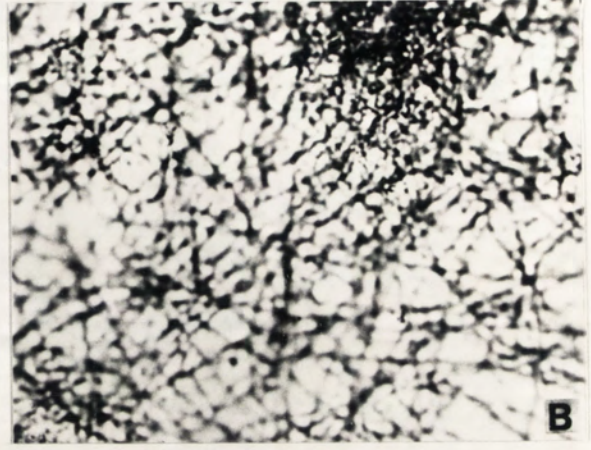


Plate CIV

Figs.A-E. *Skiagia ciliosa* (Volkova) Downie, 1982

- A. 86Z032-1. (8.3 X 96.5).
- B. 86Z032-1, (20 X 108).
- C. 86Z032-1, (21.8 X 119).
- D. 86Z025-2, (5 X 107.5).
- E. 86Z032-2, (20 X 101).

Figs.F-H. *Baltisphaeridium cerinum* Volkova, 1968

- F. 86Z032-1, (8.1 x 104.5).
- G. 86Z032-1, (8 x 97).
- H. 86Z032-1, (11 x 98.1).

Figs.I-K. *Micrhystridium ellipticum* Downie, 1982

- I. 86Z412-1, (17.5 x 107).
- J. 86Z410-2, (20.5 x 114).
- K. 86Z410-1, (20.5 x 105.6).

Fig.L. *Micrhystridium lanatum* Volkova, 1969
86Z025-1, (6 x 108.1).

Figs.M-N. *Pyritosphaera barbaria* Love, 1957

- M. 86Z032-2, (4.3 x 110.4).
- N. 86Z032-1, (17.5 X 109.5).

Fig.O. *Micrhystridium minutum* Downie, 1982
86Z032-1, (15.3 X 107.8).

Figs.P-R. *Micrhystridium tornatum* Volkova, 1968

- P. 86Z025-2, (15.5 X 96.5).
- Q. 86Z025-2, (6.7 X 101.5).
- R. 86Z025-2, (14.5 X 109).

The specimens I-K collected from the borehole Mt Winter No.1 and others from Hermannsburg No.41.

The scale bar below K is 31 μ m for M and 20 μ m for other specimens.

Plate CIV

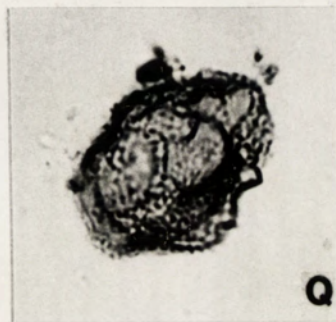
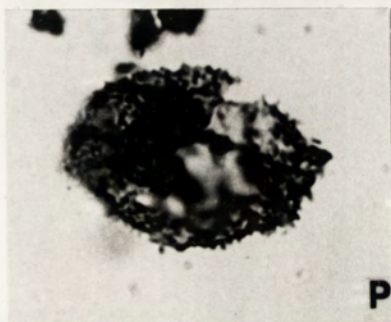
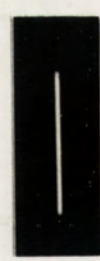
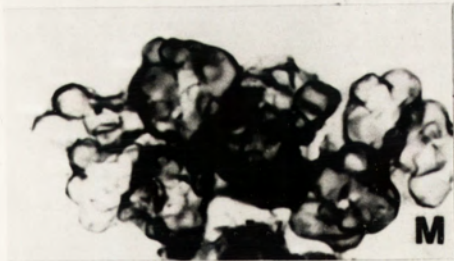
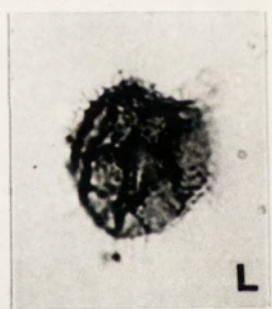
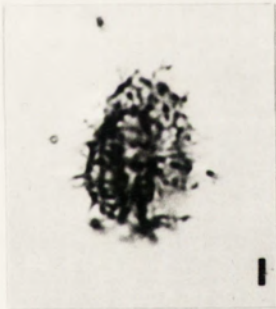
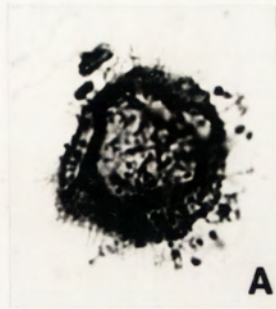


Plate CV

Figs.A-C. Unnamed specimens with a tri-radiated scar

- A. 86Z026-1, (4 x 105).
- B. 86Z025-1, (11.8 x 117).
- C. 86Z025-1, (12 x 113).

Figs.D-G. *Chomotriletes* cf. *vedugensis* Naumova, 1953

- D. 86Z025-1, (7.2 X 102.5).
- E. 86Z026-1, (8.9 X 103).
- F. 86Z417-1, (11.3 X 103.8).
- G. 86Z025-1, (5.5 X 117.7).

Fig.H. *Lophosphaeridium tuberosum* sp. nov.
86Z410-6, (4 x 117.1).

Figs.I-J. *Lophosphaeridium tentativum* Volkova, 1968

- I. 86Z025-1, (17 X 108.5).
- J. 86Z025-1, (12 X 120).

Fig.K. *Pterospermopsimorpha spongia* sp. nov.
86Z026-1, (13.2 x 109.5).

Fig.L. *Leiofusa bicornuta* Sin et Liu, 1973
86Z410-2, (6 x 98).

The specimens F, L collected from the borehole Mt. Winter No.1 and others from Hermannsburg No.41.

The scale bar below F is 20 μ m for B, F, H, I, J, K; 31 μ m for C, D, E, G, L and 40 μ m for A.

Plate CV

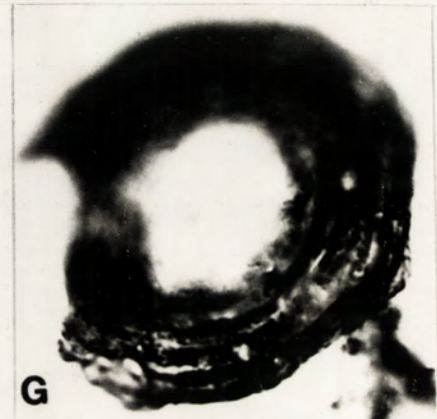
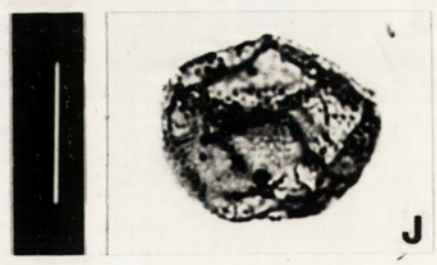
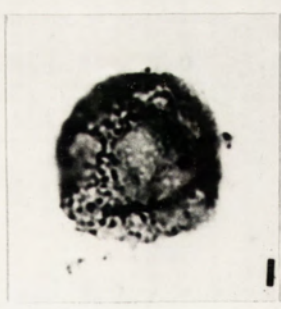
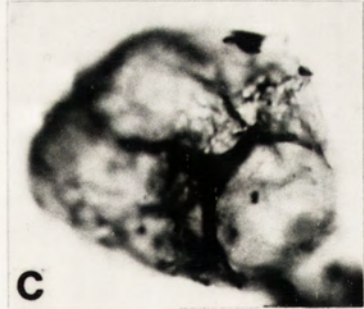
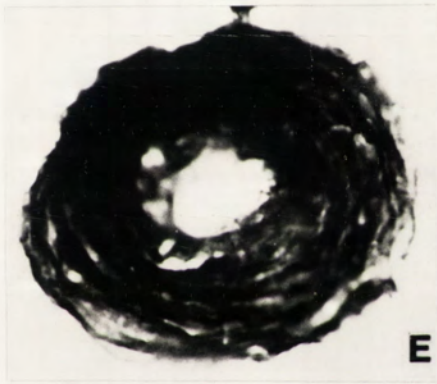
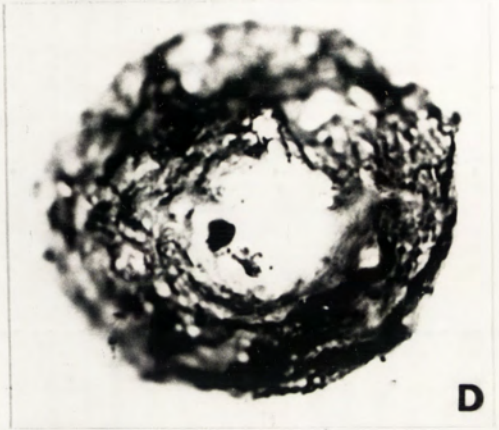
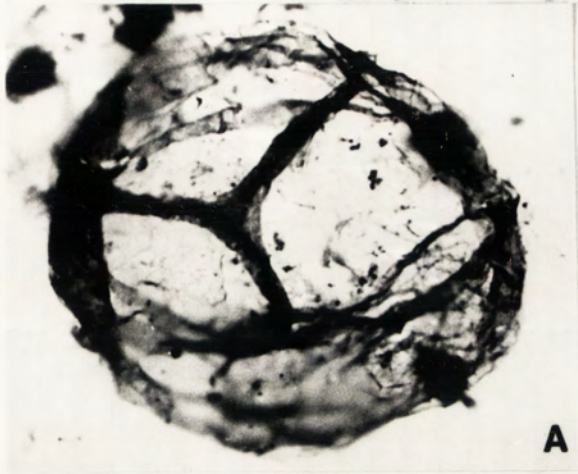


Plate CVI

Figs. A-D. *Dictyotidium birvetense* Paskviciene, 1979

- A. 86Z410-2, (12.5 X 92.5).
- B. 86Z410-2, (3.1 X 112.5).
- C. 86Z410-6, (19 X 103.1).
- D. 86Z410-2, (4.9 X 98.1).

Figs.E-H. *Palaeoanacystis kompsa* sp. nov.

- E. 86Z024-1, (7.7 X 117.3).
- F. 86Z026-1, (11 X 103.5), holotype.
- G. 86Z025-1, (12.5 X 122).
- H. 86Z025-2, (12.5 X 119).

Fig.I. *Trachysphaeridium levis* (Lopukhin) Vidal, 1974
86Z026-1, (4 x 105).

Fig.J. *Sinianella uniplicata* (Yin) emend.
86Z026-1, (11.5 x 112.5).

Fig.K. *Pirea* sp.
86Z024-1, (6 X 121).

The specimens A-D collected from the borehole Mt. Winter No.1, and others from Hermannsburg No. 41.

The scale bar below F is 40 μ m for A, B, D; 63 μ m for C, E, F, G, H, I, K and 100 μ m for J.

Plate CVI

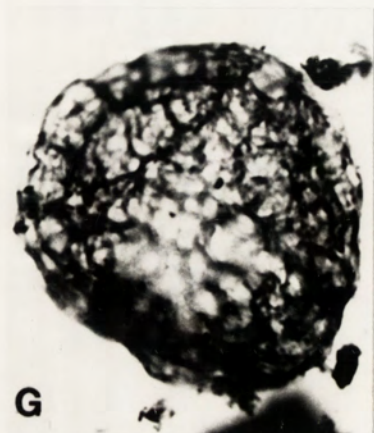
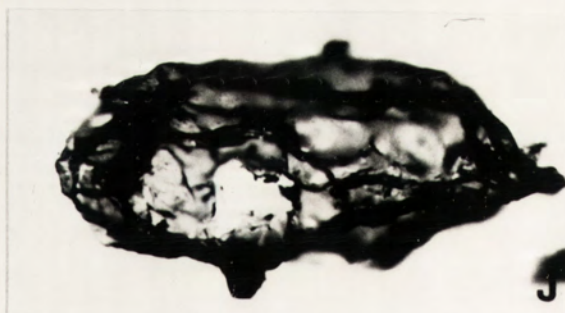
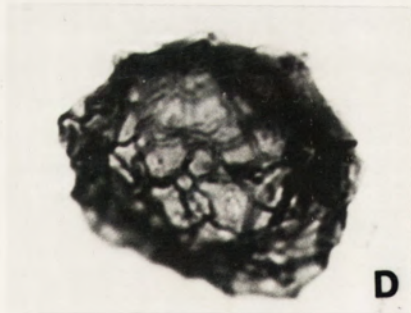
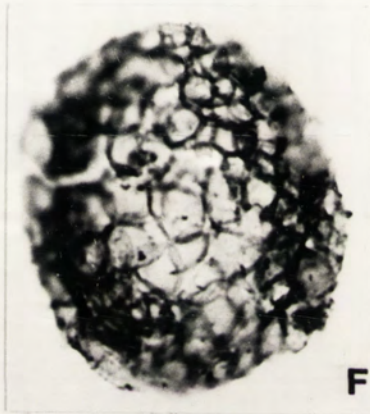
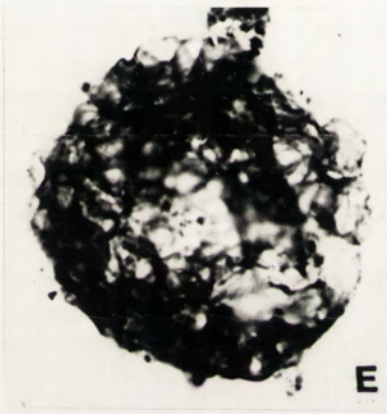
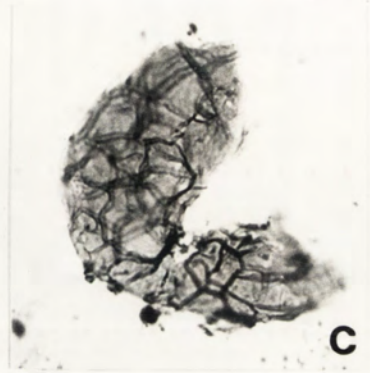
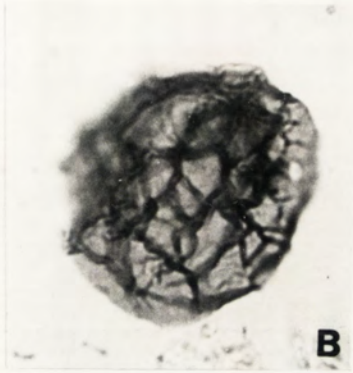
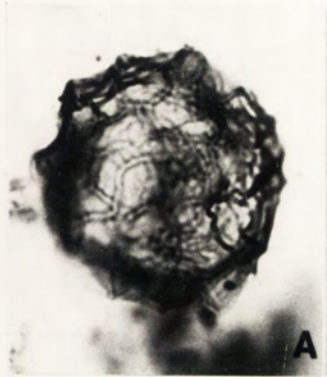


Plate CVII

Fig.A. *Leiosphaeridia asperata* (Naumova) Lindgren, 1982
86Z025-1, (11.8 x 111).

Figs.B-C. *Oscillatoriopsis* sp.
B. 86Z415-1, (9 x 113).
C. 86Z410-1, (9.6 x 97.5).

Figs.D-E. *Synsphaeridium* sp.
D. 86Z024-1, (4.3 x 108.7).
E. 86Z417-1, (12.5 x 112.5).

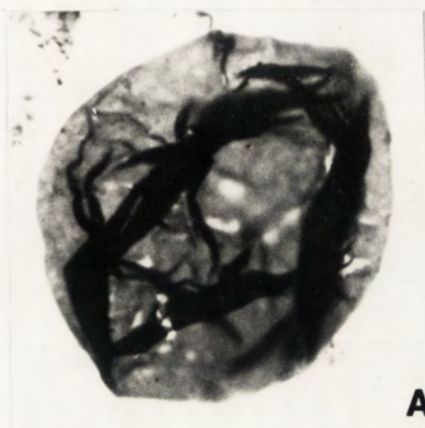
Fig.F. *Paleasphaeridium zonale* Yin Ch., 1985
86Z025-1, (11 x 116.5).

Figs.G-I. *Myxococcoides numerosa* sp. nov.
G. 86Z415-1, (16.8 x 107.4).
H. 86Z415-1, (10.8 X 113).
I. 86Z415-1, (13.5 X 117.5), holotype.

The specimens A, D, F collected from the borehold Hermannsburg No.41 and others from Mt Winter No.1.

The scale bar below B is 20 μ m for E; 31 μ m for A, D, F and 40 μ m for B, C, G, H, I.

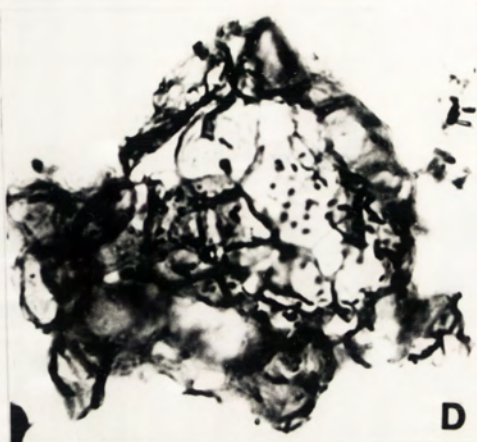
Plate CVII



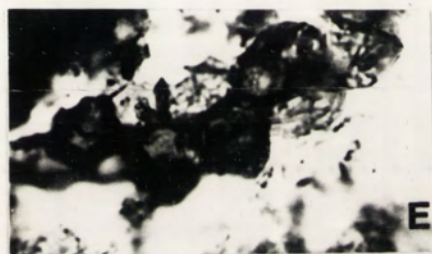
A



B



D



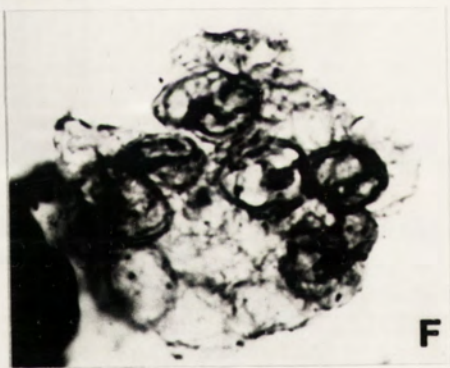
E



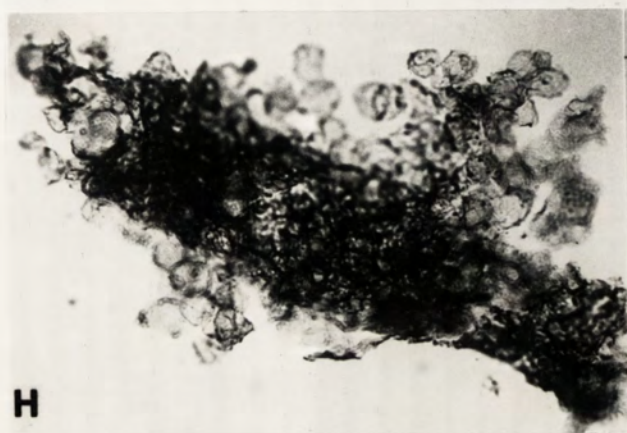
C



G



F



H



I

Plate CVIII

- Fig.A. *Leiosphaeridium asperata* (Naumova) Lindgren, 1982
86Z025-1, (6 x 100.5).
- Fig.B. *Siphonophycus* sp. B.
86Z415-1, (7 x 113.5).
- Fig.C. *Stictosphaeridium* sp.
86Z410-2, (3 x 98.5).
- Fig.D. *Trachysphaeridium levis* (Lopukhia) 1974
86Z417-1, (13.5 x 116.5).
- Fig.E. *Oscillatoriopsis* sp.
86Z410-1, (6.3 x 116).
- Figs.F-G. *Kildinosphaera chagrinata* Vidal, 1983
F. 86Z025-1, (6 X 110).
G. 86Z025-1, (7 X 96.1).
- Fig.H. *Kildinosphaera grnunata* Vidal, 1983
86Z025-2, (6 X 107).
- Fig.I. *Kildinosphaera verrucata* Vidal, 1983
86Z025-1, (14.5 x 105.4).

The specimens A, F, G, H, I collected from the borehole Hermannsburg No.41, and others from Mt Winter No.1.

The scale bars below B are 20 μ m for A; 31 μ m for F, G; 40 μ m for C, H, I; 50 μ m for E and 133 μ m for B.

Plate CVIII

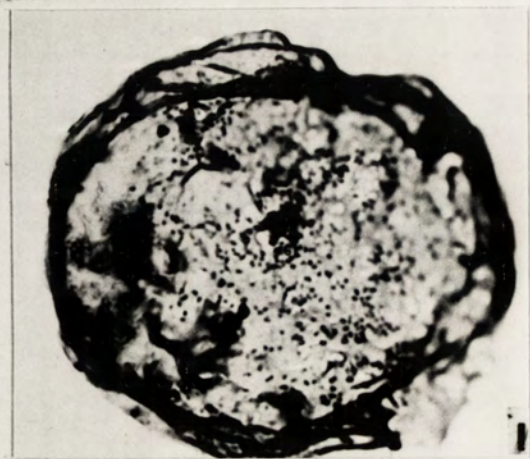
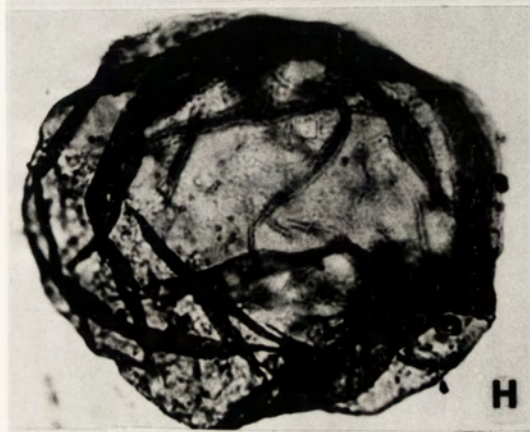
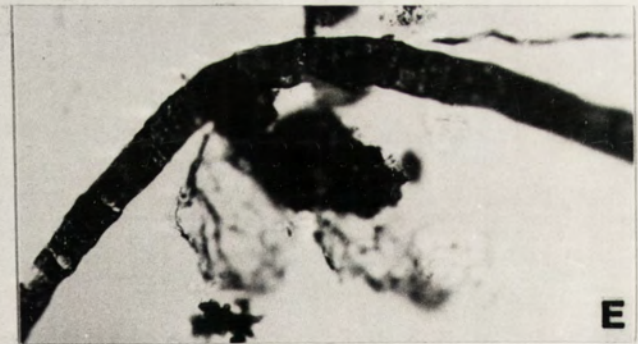
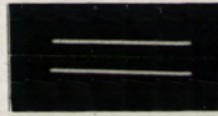
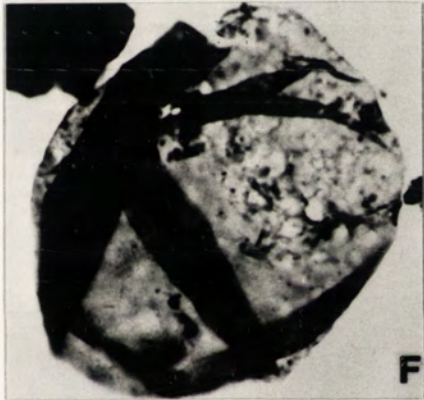
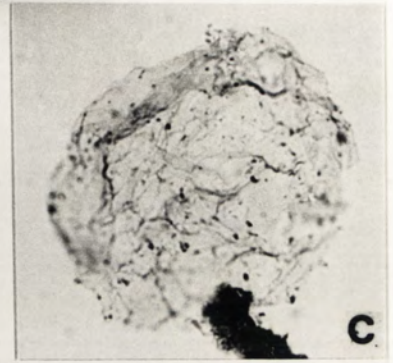


Plate CIX

Figs.A-H *Evexendafibra tempensis* gen. et sp. nov.

- A. 86Z024-1, (13 x 119).
- B. 86Z410-2, (3.9 X 99), holotype.
- C. 86Z410-6, (12.4 X 103).
- D. 86Z410-2, (15 X 93.5).
- E. 86Z410-2, (12 X 112).
- F. 86Z410-1, (16 X 111.8).
- G. 86Z410-2, (10.5 X 112.5).
- H. 86Z410-6, (14 X 102.6).

Fig.I. *Eomycetopsis spiralata* sp. nov.
86Z410-1, (7.2 X 94).

Fig.J. *Eomycetopsis robusta* (Schopf) Knoll et Golubic, 1979
86Z410-6, (8 x 112).

Fig.K. *Oscillatoriosis* sp.
86Z410-2, (8.8 x 105.8).

The specimen A collected from the borehole Hermannsburg No.41 and others from Mt. Winter No.1.

The scale bars below G are 31 μ m for E, I; 40 μ m for A; 50 μ m for B, C, D, F, H, J, K and 100 μ m for G.

Plate CIX

