

NOTES ABOUT *ASPLENIUM* II :
SOME NEW NAMES AND COMBINATIONS
IN *ASPLENIUM* L.
(ASPLENIACEAE, PTERIDOPHYTA)

by

R. L. L. VIANE * & T. REICHSTEIN **

SUMMARY. — New names and combinations in *Asplenium* are published in connection with forthcoming floristic, systematic and morphological papers. *Asplenium annobonense* is newly described.

INTRODUCTION

Aspleniaceae is a diverse cosmopolitan fern family. The only monograph is by Mettenius (1859). In anticipation of our future revision of the group (ca. 750 species), in response to the recent circumscription of Aspleniaceae as a monogeneric family (KRAMER & VIANE, 1990) and in connection with forthcoming publications on the perispore morphology, the following new combinations and new names are made. Abbreviations for herbaria follow Index Herbariorum, Ed. 8 (1990).

ALPHABETICAL LIST WITH NEW NAMES AND COMBINATIONS

Asplenium aequilaterale (Hieron.) Viane, *comb. et stat nov.*

Basionym : *Asplenium anisophyllum* Kze. var. *aequilaterale* Hieron. ; Hieronymus in Engler, Pflanzenwelt Ost.-Afr. part C. : 81 (1895).

* R. Viane, Laboratorium voor Morfologie, Systematiek en Ecologie der Planten, K. L. Ledeganckstraat 35, B-9000 Gent.

** Prof. T. Reichstein, Institut für Organische Chemie, St.-Johanns-Ring 19, CH-4056 Basel, Switzerland.

In his treatment of the Pteridophyta of German East Africa (in Engler 1895) Hieronymus published *Asplenium anisophyllum* Kunze var. *aequilaterale*. Apparently this name was never cited since, and as a varietal name it was not listed in Christensen's Index Filicum and Supplements. The holotype (B!) consists of a single sheet with two fronds (not fully mature) without rhizome; the original label reads (my italics): "**Holst 2491 — Shagaiu (= Shagayu) Wald bei Mbaramu (= N. Tanzania, Lushoto)**". On a second label (without date) Hieronymus wrote both the varietal name and "*Asplenium aequilaterale* Hieron" but without ever publishing it. It was not until Mr. W. Schippers (Aalsmeer, Netherlands) showed me his recently collected specimens from N. Tanzania (WAG) that the status and position of Hieronymus's variety could be assessed with confidence. This fern is not closely related to the group of *A. anisophyllum* (in its present circumscription) but is closer to the tropical African *A. macrophlebium* Baker complex, which needs more study. This terrestrial plant (with an erect rhizome) grows in mid-montane (1350-1950 m) forests and seems to be restricted to the north eastern Tanzanian (South Pare and Western Usambara) mountains. Hieronymus's "variety" is sufficiently distinct to be recognized as a distinct species.

***Asplenium annobonense* Viane, spec. nov.**

Asplenium habitu *Asplenii annetii*, differt pinnis conspicue dentatis et sporis echinatis. — Typus: *Mildbraed 6509* (holo B; iso HBG!), Sept. 1911, Annobon, Nord-Kraterrand, am Boden, sehr häufig, Nebelwald.

This is a validation of *Asplenium annobonense* Hieron. ex Mildbr. (*nom. nud.*) in Wiss. Ergeb. Zweit. Deutsch. Z.-Afr.-Exped. 1910-11, II: 159 (1922). Alston referred this taxon to *A. geppii* Carr. (= *A. anisophyllum* Kze.) in Exell's Catalogue of the Vascular Plants of S. Tomé (1944), from which it is clearly distinct in its scales, the presence of gemmae (buds), and spores. The taxon resembles *A. annetii* (Jeanp.) Alston in the form and location of its gemmae but differs clearly in texture, smaller and conspicuously dentate pinnae, and echinate spores.

***Asplenium atuntzeense* Viane & Reichstein, nom. nov.**

— *Asplenium subdigitatum* Ching, Acta Phytotax. Sin. 23: 8 (1985), non Mett. ex Kuhn (1868)

The holotype (C. W. Wang 70356, PE !) was collected in Yunnan, Dêqên (= Atuntze) at 2700 m alt. The species could not be named after its collector (C. W. Wang) as there already exists an *A. x. wangii* Kuo (1988). In Beijing (PE) another specimen (T. T. Yü 5710) is also marked as TYPE of *A. subdigitatum* Ching, but is not mentioned with the description and may represent another new species. *Asplenium atuntzeense* Ching ex Chang *et al.* (1976 : 242) is a nomen nudum, its "type" specimen was later described by Ching as *A. degenense* Ching (1985) (= *A. ruta-muraria* L.).

When the Hawaiian genus *Diellia* Brack. (5 species) is included in *Asplenium*, new names for the following species have to be made since all but one ("unisora") of the specific epithets are occupied in *Asplenium*. In accordance with ICBN article 23.3., the prefix "diel" followed by the original epithet will be used for practical reasons and in order to keep taxa together in the herbarium.

Asplenium dielerectum* Viane, *nom. nov.

— *Diellia erecta* Brack., U. S. Expl. Exped, 16 : 218 (1854)

The epithet cannot be transferred to *Asplenium* since this would create a later homonym for *A. erectum* Bory ex Willd. (1810) and *A. erectum* Bl. (1828), non Bory ex Willd.

Asplenium dielfalcatum* Viane, *nom. nov.

— *Diellia falcata* Brack., U. S. Expl. Exped. 16 : 219 (1854)

The epithet cannot be transferred to *Asplenium* since this would create a later homonym for *A. falcatum* Lam. (1786), *A. falcatum* Thunb. (1800), non Lam., *A. falcatum* Sw. (1806), non Lam. nec Thunb., *A. falcatum* Bedd. (1863), non Lam nec Thunb nec Sw.

Asplenium diellaciniatum* Viane, *nom. nov.

— *Lindsaea laciniata* Hillebr., Fl. Haw. Isl. : 621 (1888)

The epithet cannot be transferred to *Asplenium* since this would create a later homonym for *A. laciniatum* D. Don (1825). At the same time *A. laciniatum* sensu Hook. et auct. non Don is a widely misapplied name for *A. gueinzianum* Mett. ex Kuhn. A proposal to reject *A. laciniatum* D. Don (ICBN art 69) was submitted by Viane & Reichstein (1986) but not accepted for obscure reasons totally contrary to the intentions set forward in Preamble 1 (ICBN 1988).

Asplenium dielmannii Viane, *nom. nov.*

— *Microlepia mannii* D. C. Eaton, in Mann, Proc. Amer. Acad. Arts and Sci. 7 : 212 (1867)

The epithet cannot be transferred to *Asplenium* since this would create a later homonym for *A. mannii* Hook. (1861) and *A. mannii* Hillebr. (1888), non Hook.

Asplenium dulongjiangense Viane, *nom. nov.*

— *Ceterachopsis qiujiangensis* Ching et Fu, Acta Phytotax. Sin. 22 : 411 (1984)

In this case the specific epithet cannot be transferred to *Asplenium* as there already exists an *Asplenium qiujiangense* Ching ex Wu (1989), based on a different type.

Asplenium fujianensoides Viane, *nom. nov.*

— *Asplenium fujianense* Ching ex Wu, Bull. Bot. Research 9 : 88 (1989), non Ching (1981).

Wu ascribed this name to Ching (who died in 1986) but overlooked the earlier epithet (based on a different type) of a similar plant also belonging to the *A. wrightii* Eat. group (badly in need of taxonomical revision). Several other “new species” of doubtful status have been described in this complex recently.

Asplenium latipes (Ching ex Wu) Viane, *comb. nov.*

Basionym : *Neottopteris latipes* Ching ex Wu, Guihaia 9 : 290 (1989)

Asplenium latibasis (Ching) Viane, *comb. nov.*

Basionym : *Neottopteris latibasis* Ching, Acta Phytotax. Sin. 9 : 357 (1964)

Asplenium latilobum Viane, *nom. nov.*

— *Ceterachopsis latibasis* Ching et Shing, Acta Phytotax. Sin. 22 : 411 (1984),

— *Ceterachopsis latiloba* Ching et Shing ex Chang *et al.*, Sporae Pterid. Sin. : 256 (1976), *nom. nud.*

Since the epithet "latibasis" is retained for its earlier combination under *Neottopteris* (1964), a new name is required for the present taxon. Many names used by Chang *et al.* (1976, = Zhang *et al.*, 1990) and attributed to Ching are *nomina nuda*, but since the epithet "latiloba" was recently used for the same taxon by Bir *et al.* (1985), we prefer to use it for the present species.

Asplenium lolegnamense (Gibby & Lovis) Viane, *comb. nov.*

Basionym : *Ceterach lolegnamense* Gibby & Lovis, Fern Gaz. : 287 (1989)

Asplenium longistipes (Ching ex Wu) Viane, *comb. nov.*

Basionym : *Neottopteris longistipes* Ching et Wu, Guihaia 9 : 289 (1989)

Asplenium morogoreense Viane, *nom. nov.*

— *Asplenium spathulatum* Peter, Repert. Sp. Nov. Regn. Veg. Beih. 40 (1) : 81. Descr. 8 (1929), non Bak. (1894).

A. spathulatum Peter is illegitimate as a later homonym of *A. spathulatum* Bak. Its valid name in *Loxoscaphe* is *L. spathulata* Pic. Ser. (1977). The type of this species was collected in the Tanzanian Uluguru Mts., "Urwald südöstlich der Mission Schlesien, über Morogoro", at 1600 m alt. (XI-1914). The first author has studied an Isotype in B. According to Pichi-Sermolli (1977) there are two type sheets in GOET.

Asplenium neohainanense Viane, *nom. nov.*

— *Neottopteris hainanensis* Ching, Acta Phytotax. Sin. 9 : 357 (1964)

The epithet "hainanensis" cannot be transferred to *Asplenium* as this would create a later homonym of *A. hainanense* Ching (1936), based on a different type.

Asplenium papaverifolium (Kze.) Viane, *comb. nov.*

Basionym : *Gymnogramma papaverifolia* Kunze, Anal. Pterid. : 12 (1837)

This is the correct name for the South American "*Pleurosorus*" *papaverifolius* (Kze.) Fée.

Asplenium parvifolium (Benl & Kunkel) Vida & Reichstein, *comb. et stat. nov.*

Basionym : *Ceterach aureum* (Cav.) L. v. Buch var. *parvifolium* Benl & Kunkel, Ber. Schweiz. Bot. Ges. 77 : 262 (1967).

Cytological research by G. Vida (Budapest) and T. Reichstein (Basel) has shown that this species is an allo-octoploid ($n = 144^{II}$) that probably arose by chromosome doubling in a cross of allotetraploid *A. aureum* Cav. with autotetraploid *A. ceterach* L.

Asplenium scolopendrium L. ssp. **scolopendrium** var. **antri-jovis** (Kümmerle) Reichstein, Rasbach et Viane, *stat. nov.*

Basionym : *Biropteris antri-jovis* Kümmerle, Magyar Botan. Lapok 19 : 2 (1922)

Within *A. scolopendrium* two cytotypes, diploid and tetraploid, are known. In Europe and western Asia only the diploid ssp. *scolopendrium* is known. Since the typical and widespread var. *scolopendrium* shows introgression with var. *antri-jovis*, the status of the latter is reduced to that of a variety. The three tetraploid members of this species, treated as varieties below, are only slightly different but are geographically widely separated.

Asplenium scolopendrium L. ssp. **japonicum** (Komarov) Rasbach, Reichstein et Viane, *comb. nov.*

Basionym : *Phyllitis japonica* Komarov, Bull. Jard. Bot. Acad. Sci. URSS. 30 : 191 (1932)

Asplenium scolopendrium L. ssp. **japonicum** var. **americanum** (Fernald) Reichstein, Rasbach et Viane, *comb. nov.*

Basionym : *Phyllitis scolopendrium* L. var. *americana* Fernald, Rhodora 37 : 200 (1935)

Asplenium scolopendrium L. ssp. **japonicum** var. **lindenii** (Hook.) Viane, Rasbach et Reichstein, *comb. nov. et stat. nov.*

Basionym *Scolopendrium lindenii* Hooker, Icon. Pl. 5 : t. 488 (1842)

Var. *japonicum* occurs in eastern Siberia and in Japan, var. *americanum* is rare in eastern North America ; var. *lindenii* is presently

only known (very rare) from southern Mexico and Haiti. Contrary to the report of Löve & Löve (1973), we (H.R.) found that var. *lindenii* is tetraploid. A. R. Smith (Fl. Chiapas : 170, 1981) has pointed out that the former counts were obtained from cultivated material (of doubtful origin), no voucher was prepared.

Asplenium subantiquum (Ching ex Wu) Viane, *comb. nov.*

Basionym : *Neottopteris subantiqua* Ching ex Wu, *Guihaia* 9 : 291 (1989)

Asplenium translucens (Holt.) Viane, *comb. nov.*

Basionym : *Diplora translucens* Holttum, *Dansk. Bot. Ark.* 25 : 41 (1967)

Asplenium unisorum (Wagner) Viane, *comb. nov.*

Basionym : *Diellia unisora* Wagner, *Amer. Fern J.* 41 : 9 (1951)

Asplenium × **claphamii** (Moore ex E. J. Lowe) Viane, *comb. nov. et stat. nov.*

Basionym : *Asplenium lanceolatum* var. *claphami* Moore ex E. J. Lowe, *Our Native Ferns Vol. 2* : 155 (1867)

As long as *A. lepidum* C. Presl [including, i.a., ssp. *haussknechtii* (Godet & Reuter) Brownsey] and *A. trichomanes* L. are considered to include several subspecies, their hybrids should be treated under the name *A.* × *reuteri* Milde (see below). If their subspecific taxa are recognized as full species, then the nomenclature given in Reichstein (1981) applies.

Asplenium × **reuteri** Milde nssp. **stiriacum** (Meyer emend. Lovis, Melzer & Reichstein) Viane et Reichstein, *comb. nov.*

Basionym : *Asplenium* × *stiriacum* Meyer emend. Lovis, Melzer & Reichstein, *Bauhinia* 3 : 88 (1966)

This is the correct name for the **triploid** hybrid between *A. lepidum* ssp. *lepidum* and *A. trichomanes* ssp. *inexpectans* Lovis.

Asplenium × **reuteri** Milde nssp. **aprutianum** (Lovis, Melzer & Reichstein) Viane et Reichstein, *comb. nov.*

Basionym : *Asplenium* × *aprutianum* Lovis, Melzer & Reichstein, *Bauhinia* 3 : 89 (1966)

This is the correct name for the **tetraploid** hybrid between *A. lepidum* ssp. *lepidum* and *A. trichomanes* ssp. *quadrivalens* Meyer emend. Lovis. *A. reuteri* nssp. *reuteri* is the tetraploid hybrid between *A. lepidum* ssp. *haussknechtii* and *A. trichomanes* ssp. *quadrivalens*.

Asplenium* × *rouyi Viane, *nom. nov.*

— *Scolopendrium lobatum* Rouy, III. *Pl. Europ. Rar.*, Vol. VI : 32 (1895)

This new name is needed since the epithet cannot be transferred to *Asplenium* as this would create an illegitimate later homonym of *A. lobatum* Pappe & Rawson (1858). According to Meyer (1969) this is probably a hybrid between *A. onopteris* L. and *A. scolopendrium* L. The type is from Portugal.

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