

DIAGNOSES OF NEW CYRTANDRA SPECIES (GESNERIACEAE)
HAWAIIAN PLANT STUDIES 144

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Abstract

Cyrtandra is the largest genus of flowering plants native to the Hawaiian Islands. Thirty five new species, and one new variety, are here described, and two species are renamed. Their types are in the Bishop Museum in Honolulu.

Section Chaetocalyces

Cyrtandra aequalis sp. nov. Ramulae pilosae sunt, petiolis 3-5.5 cm longis pilosis, laminis 12.5-18 x 4.1-5.7 cm coriaceis elliptici-fusiforbibus acuminatis cuneatis serratis supra hirsutis infra in nervis catenulate hirsutulis, cymis 4 cm longis 3-floriferis, pilosis, pedunculo 15 mm longo, pedicellis 10-15 mm longis, calycibus 17 mm longis pilosulis lobis 15.3 x 1 mm ligulatis, corollis (siccatis) 15 mm longis pilosis tubo 9 mm longo loba infera 5 mm diametro suborbiculari. Holotypus: Maui I., Honokahau, C. N. Forbes 436.M

Cyrtandra Christensenii sp. nov. Frutex 0.8-1 m altus est, petiolis 6-10.5 cm longis adpresse badie pilosulis, laminis 26-28 x 0.3-11.5 cm chartaceis acutis basi deminuta marginibus serrati-crenatis supra aliter glabris sed midnervo adpresse badie pilosulis infra pallidioribus et in nervis principalibus adpresse badie pilosulis nervis secundariis 13-14 in dimidio quoque, cymis 3.5-4 cm longis 1-3-floriferis adpresse badie pilosulis, pedunculo 3 mm longo, bracteis 12 mm longis lanceolatis, pedicellis 7-10 mm longis, calycibus (vivos) in gemma 18 mm longis fusiformibus rostro 6 mm longo, et in flore 27 mm longo deciduis cum 3 lobis 10 mm longis, lanceo-subulatis, corollis 30 mm longis albis tubo 18 mm longo decurvato, lobis superis 7 mm diametro orbicularibus, loba infera 10 x 8 mm oblongo-elliptica, baccis 12 x 9 mm ovoideis glabris. Holotypus: Kauai I., Lumahai Stream, forest, 700 ft. elev., July 16, 1977, C. Christensen 256.

Cyrtandra elliptiopicis sp. nov. Frutex est, novellis dense adscendente pilosis, petiolis 1.7-6 cm longis sparse pilosis, laminis 4.7-15 x 2.5-6.8 cm chartaceis ellipticis acuminatis basi cuneata breve decurrenti marginibus serratis supra catenulate hirsutis infra in superficie minute puberulis sed midnervo et secundariis pilosulis nervis

secundariis 9-11 in dimidio quoque, cymis 20-25 mm longis 1-3-floriferis pilosulis, pedunculis 3-6 mm longis bracteis 4 mm longis linearibus, pedicellis 6-10 mm longis, calycibus (siccatis) 10-11 mm longis pilosis lobis 9-10 mm longis infra ligulatis et 1.5-2 mm latis sed apice 2.5-3 mm latis ellipticis, corollis (siccatis) 18-19 mm longis albis hirsutulis loba infera 6 mm longa late elliptica. Holotypus: east Maui, Honomanu, May 1911, J. F. Rock s.n.

Cyrtandra Gagnei sp. nov. Frutex est, novellis dense adpresse hirsutulis, petiolis 12-18 mm longis dense adscendente fulve hirsutulis, laminis 3.5-7.3 x 1.9-3.8 cm coriaceis obovatis (vel oblanceolatis) subacuminatis basi cuneata marginibus crenatis-serratis supra adscendente hirsutulis infra pallidis et glabris nervis principalibus dense adscendente puberulis, cymis 3-3.5 cm longis 1-(2)-floriferis adscendente hirsutulis, pedunculo 6-10 mm longo, bracteis 5-6 mm longis lineari-lanceolatis, pedicellis 8-10 mm longis, calycibus 11-13 mm longis profuse adscendente hirsutulis lobis 8-11.5 x 1-1.5 mm ligulatis, corollis 12 mm longis in fauce 4 mm diametro adscendente hirsutulis, lobis superis 3 x 3 mm, loba infera 5.5 x 4 mm ovata, ovario glabro. Holotypus: Maui I., Koolau Forest Reserve, 5,400 ft. alt., W. Gagné & S. Montgomery 384.

Cyrtandra Harrisonae sp. nov. Frutex est, novellis dense adpresse badie pilosulis, petiolis 2-3 cm longis item pilosulis, laminis 7.3-14 x 3.8-6.2 cm subcoriaceis ellipticis acuminatis basi cuneata complanate serrulatis supra adpresse puberulis infra pallidis et nervis dense puberulis, cymis 2.5-3.5 cm longis 3-floriferis dense adpresse adscendente badie pilosulis, pedunculis 6-9 mm longis, bracteis 3-6 mm longis ellipticis, pedicellis terminalibus 6-13 mm longis gemmis campanulatis, calycibus 13-14 mm longis item pilosulis, lobis 11-12 x 1.5-2.5 mm ligulatis obtusis, corollis 26 mm longis glabris in fauce 6 mm diametro, lobis superis 5 x 7 mm, loba infera 5.5 x 11 mm suborbiculari, pistilo glabro, baccis 15 x 11 mm obovoideis. Holotypus: Maui I., Kipahulu, 5,830 ft. alt., Betsy Harrison 285.

Cyrtandra honokawaiensis sp. nov. Frutex est, novellis dense fulve hirsutis, petiolis 3-3.7 cm longis hirsutis, laminis 8.5-11 x 4-5.7 cm membranaceis oblancei-ellipticis acuminatis basi anguste cuneata et decurrenti marginibus ciliatis et serrulatis supra pustulate hirsutis infra in nervis hirsutis, cymis 4 cm longis 1-floriferis profuse fulve hirsutis, pedunculis 7 mm longis, bracteis 7-9 mm longis lineari-lanceolatis, pedicellis 10-11 mm longis, calycibus 19-19.5 mm longis hirsutis lobis 15-17 x 0.8-1.5 mm ligulatis obtusis,

corollis 19 mm longis hirsutis lobis superis 2 mm longis loba infera 6.5 mm longa, ovario glabro. Holotypus: Maui I., Honokawai, J. F. Rock 8,157

Cyrtandra honomanuensis sp. nov. Frutex est, novellis pilosis, petiolis 9-9.5 cm longis pilosis, laminis 15-18.5 x 9-10.6 cm membranaceis late ellipticis subacuminatis basi gracile deminuenta infra sparse pilosulis, cymis 2.5-3.5 cm longis 3-floriferis pilosis, pedunculis 8-10 mm longis, bracteis 3-5 mm longis anguste lanceolatis, pedicellis 5-9 mm longis, calycibus 10-12 mm longis pilosis lobis anguste ligulatis sed apice ellipticis, corollis 15 mm longis pilosulis. Holotypus: Maui I., Honomanu Gulch, May 1911, J. F. Rock s.n.

Cyrtandra humiliserrulata sp. nov. Frutex est, ramulis foliosis glabris, petiolis 2-5 cm longis pilosulis, laminis 5.5-12.3 x 2.3-3.4 cm chartaceis fusiformibus acutis basi gracile cuneata et breve decurrenti supra sparse hirsutulis infra pallidis et adpresse hirsutulis, cymis 3.5 cm longis 1-floriferis pilosulis, pedunculo 15 mm longo, pedicellis 12 mm longis, calycibus 12-13 mm longis adscendente pilosulis lobis 8-9 x 2 mm ligulatis, baccis 12 mm longis subglobosis. Holotypus: Molokai I., Mapulehu mts., J. F. Rock 12,576.

Cyrtandra indiscissa sp. nov. Frutex est, novellis badie pilosis, petiolis 8-9.5 cm longis pilosis, laminis 15-19 x 9-10.5 cm membranaceis ellipticis breve acuminatis basi anguste cuneata marginibus serrulatis supra sparse pilosis infra pallidioribus et in nervis pilosis, cymis 3-4 cm longis 3-floriferis pilosis, pedunculo 6-11 mm longo, bracteis 4-7 mm longis lanceolatis, pedicellis 5-11 mm longis, calycibus 10-12 mm longis pilosis lobis 9-10.5 mm longis parte infera 1 mm lata ligulata parte apicali 3-4 mm lata elliptica, corollis 13-15 mm longis villosis. Holotypus: Maui I., Honomanu Gulch, May 1911, J. F. Rock s.n.

Cyrtandra noie sp. nov. Frutex est, novellis adpressa pilosulis, foliis inaequalibus, petiolis 1.5-4 cm longis sparse adpresse pilosulis, laminis 4.5-12.7 x 1.8-4 cm chartaceis fusiformibus acuminatis basi gracile cuneata marginibus adpresse serrulatis supra sparse adpresse pilosulis infra subalbis et in nervis adpresse pilosulis, cymis 5 cm longis 3-5-floriferis adpresse adscendente pilosulis, pedunculis 18 mm longis, bracteis 10 mm longis linearibus, pedicellis 10-13 mm longis, calycibus 13-15 mm longis lobis 11-13 x 1 mm ligulatis, corollis 17 mm longis adscendente adpresse pilosulis in fauce 4 mm diametro decurvatis loba infera 3.5 x 3 mm suborbiculari. Holotypus: Maui I., Honomanu, May 1911, J. F. Rock s.n.

Cyrtandra vespertina nom. nov.

C. occidentalis St. John, *Phytologia* 63: 471, 1987, non B. L. Burtt (1978).

Cyrtandra villosula sp. nov. Frutex 2 m altus est, novellis dense adpresse fulve pilosis, petiolis 1-4.6 cm longis adscendente fulve pilosis, laminis 4-14 x 1.7-5.3 cm chartaceis oblanceolatis subacuminatis basi anguste cuneata marginibus serrulatis supra glabratis infra albi-viridibus nervis principalibus dense adpresse fulve pilosulis nervulis sparse puberulis, cymis 5-7 cm longis 3-5-floriferis idem pilosulis, pedunculis 17-30 mm longis, bracteis nullis, pedicellis 12-19 mm longis, calycibus 22-24 mm longis idem pilosulis lobis 19-21 x 2.5-3.5 mm lineari-lanceolatis varie ligulatis, corollis 20-22 mm longis albis. Holotypus: Hawaii I., Koa Mill, 4,500 ft. alt., H. St. John et al. 23,479.

Cyrtandra waikamoiensis sp. nov. Frutex 2 m altus ramosus est, novellis dense fulve adscendente pilosis, petiolis 18-24 mm longis pilosis laminis 7.5-11 x 2.4-4.6 cm crasse chartaceis ellipticis (oblanceo-latisve) acuminatis basi anguste cuneata marginibus humiliter serrulatis supra catenulate hirsutulis infra subalbi-viridibus intervallis pilosulis nervis principalibus densiore pilosulis nervis secundariis 8-10 in dimidio quoque, cymis 6-12 cm longis 4-6-floriferis dense adpresse adscendente hirsutulis, pedunculis 3-7 cm longis, bracteis 12-15 mm longis lanceolatis, pedicellis 15-32 mm longis, calycibus (siccatis) 12-15 mm longis albis, tubo 1.5 mm longo, lobis -13 mm longis hirsutulis parte 2/3 basali 1-1.5 mm lata ligulata parte 1/3 apicali 2.5-3 mm late elliptica in fructu lobis 16 mm longis, corollis (siccatis) 19-20 mm longis hirsutulis. Holotypus: Maui I., Pualaia, Dec. 5, 1919, C. N. Forbes 1,748.M.

Cyrtandra wailauensis sp. nov. Frutex 2 m altus est, novellis dense subbadie catenulate hirsutis, foliis inaequalibus, petiolis ramularum principalium 4 cm longis dense catenulate hirsutis in basi connate perfoliatis, laminis 13-27 x 9-15 cm crasse chartaceis late ellipticis subacutis basi cuneata decurrenti marginibus serratis supra catenulate hirsutis infra subalbis intervallis sparse catenulate hirsutis midnervo et nervis secundariis hirsutis, cymis 2-3 cm longis 1-floriferis (vel 3-floriferis) dense catenulate hirsutis, pedunculis pedicellisque 2 mm longis, bracteis 1.5 mm longis lanceolatis, calycibus 8-9 mm longis hirsutis tubo hemisphaerico lobis 7-8 mm longis anguste ligulatis acutis corollis 25 mm longis. Holotypus: Molokai I., Wailau Valley, 220 m alt. 12-28-1936, F. R. Fosberg 13,470.

Section *Cylindrocalyces*

Cyrtandra laevicalyctis sp. nov. Frutex est, novellis petiolis et inflorescentia dense adpresse adscendente subrubri-badie pilosulis, foliis inaequalibus, petiolis 25-55 mm longis, laminis 8-19 x 4.6-7.8 cm chartaceis ellipticis acuminatis basi breve cuneata marginibus humiliter serrulatis supra midnervo pilosulo infra subalbis sparse adscendente pilosulis et in nervis principalibus abundantiore nervis secundariis 14-17 in dimidio quoque, cymis 3 cm longis 7-floriferis, rhachidi 3-5 mm longo, bracteis 2 mm longis lanceolatis, pedicellis 7-11 mm longis, gemmis 15 mm longis fusiformibus glabris rostro 4 mm longo 5-lobato. Holotypus: Kauai I., Wahiawa mts., 1979, S. Perlman 443.

Cyrtandra paludosa Gaud., var. *montana* var. nov. A var. subherbacea differt in caulibus pilosis, petiolis 1-2.5 cm longis pilosulis, laminis 6-12.2 x 2.5-5.8 cm ellipticis basi cuneata marginibus crenati-dentatis supra midnervo adpresse puberulo infra nervis adpresse adscendente pilosulis, cymis 2-2.5 cm longis 1-3-floriferis, pedicellis 5-7 mm longis puberulis, calycibus 15-16 mm longis oblanceolatis. Holotypus: Kauai I., head of Kalalau Valley, wet forest, 1,230 m alt., 12/29/35, F. R. Fosberg 12,698.

Cyrtandra septentrionalis sp. nov. Frutex 1-2 m altus est, novellis dense subbadie catenulate hirsutis, foliis inaequalibus, petiolis 1-5 cm longis dense catenulate hirsutis, laminis 7-14.5 x 4-9 cm chartaceis ellipticis acuminatis basi inconcinne cuneatis et decurrentibus marginibus serrulatis ciliatis supra grosse hirsutis infra pallidioribus intervallis et nervulis puberulis nervis principalibus pilosis nervis secundariis 11-13 in dimidio quoque, cymis 2-3 cm longis 1-floriferis, pedunculo et pedicello 5 mm longo, calycibus (siccatis) 20 mm longis hirsutulis labia supera 7 mm longa cum 3 dentibus 2 mm longis lanceolatis, labia infera 8 mm longis cum 2 dentibus 6 mm longis lanceolatis, corollis hirsutis. Holotypus: Kauai I., Wainiha Valley, forest, 1000 ft. alt., Dec. 26, 1956, H. St. John 25,991.

Section *Lobicalyces*

Cyrtandra acriserrata sp. nov. Frutex 1.3-2.7 m altus est, novellis badie catenulate hirsutis, foliis 4 (-3) in nodo, petiolis 12-45 mm longis sparse hirsutis, laminis 4.5-13.5 x 1.2-3.1 cm subcoriaceis fusiformibus subacuminatis basi longe cuneatis marginibus grosse serratis supra glabris infra pallidioribus et in nervis principalibus sparse hirsutis nervis secundariis 7-9 in dimidio quoque,

cymis 15-35 mm longis 1-floriferis hirsutis, pedunculo 8-10 mm longo, pedicello 10-12 mm longo, bracteis 10-12 mm longis lanceolatis, calycibus (siccatis) 11-12 mm longis albis, tubo 1 mm longo dense hirsuto, lobis 10-11 mm longis lanceolatis subglabris, corollis (siccatis) 11 mm longis albis dense hirsutulis, tubo 10 mm longo subrecto. Holotypus: Molokai I., Kukuinui Valley, Wailau, woods 2,400-2,700 ft. alt., July 4, 1933, H. St. John et al. 13,272.

Cyrtandra habenosa sp. nov. Frutex 1.5 m altus est, novellis dense adpresse adscendente pilosulis, foliis 3-verticillatis, petiolis 8-18 mm longis cum pilis simultibus, laminis 6.5-10.6 x 2.8-4.2 cm chartaceis ellipticis acuminatis basi cuneata marginibus compressse serrulatis supra hirsutulis infra pallidioribus et in superficie glabris sed midnervo et 8 nervis secundariis adpresse adscendente puberulis, pedicellis 18 mm longis pilosulis, calycibus (siccatis) 13-15 mm longis adscendente pilosulis, tubo 1.5 mm longo lobis cum corpore 2-3 mm lato ligulato et apice 4.5-5 mm longo elliptico, corollis (siccatis) 25 mm longis tubo 16-17 mm longo extra fauce pilosulo, lobis superis 4.5 mm longis ellipticis, loba infera 7 mm longa suborbiculari, baccis rostratis. Holotypus: east Maui, Hana Dist., Kipahulu Valley, forest, 4,750 ft alt. U.S.F.W.S. Bird Survey, Transect 17, Station 34, F. R. Warshauer & P. H. McEldowney 2,854.

Cyrtandra hemisphaerica nom. nov.

C. ustulata St. John, *Phytologia* 63: 483, 1987, non 63: 493, 1987.

Cyrtandra kawalaensis sp. nov. Holotypus: Frutex 4 m altus est, foliis 3-verticillatis, petiolis 10-14 mm longis pilosulis, laminis 4-7 x 1.8-2.3 cm chartaceis lanceolatis acutis basi cuneata marginibus serrulatis supra catenulate hirsutulis infra pallidioribus et in superficie puberulis sed densiorie ita in 9-11 nervis secundariis, cymis 5 cm longis 1-3-floriferis pilosulis, pedunculo et pedicello 2 cm longo, calycibus (siccatis) 19 mm longis pilosulis, tubo 12 mm longo labia supera 8 mm longa cum 3 lobis 3 mm longis deltoideis, labia infera 10 mm longa cum 2 lobis late lanceolatis, corollis 24 mm longis glabris lobis superis 4 x 6 mm oblate orbicularibus, labia infera 12 mm longa, loba infera 7 x 5 mm oblongo-elliptica. Holotypus: Molokai I., Kawela Gulch, 3,500 ft. alt., Dec. 30, 1938, H. St. John et al. 19,895.

Section Microcalyces

Cyrtandra semiorbicularis sp. nov. Frutex 1.3 m altus est, ramulis foliosis dense badie retrorse catenulate

hirsutis, petiolis 8-25 mm longis dense hirsutis, laminis 5-10 x 1.5-3.5 cm coriaceis oblanceolatis acutis basi cuneata marginibus humiliter serratis supra catenulate hirsutulis infra pallidioribus et profuse pilosis nervis secundariis 9 in dimidio quoque, cymis 2-2.5 cm longis 1-floriferis profuse badie pilosis, pedunculo 10 mm longo, bracteis 8 mm longis lanceolatis, pedicellis 16 mm longis, calycibus (siccatis in fructu) 8-9 mm longis 1/3 partitis, lobis 3 x 6 mm semiorbicularibus apiculatis, baccis (siccatis) 10 mm longis ovoideis acutis pilosulis. Holotypus: Kauai I., Limahuli Valley, forest, 1,790 ft. alt., July 5, 1978. S. Perlman & C. Wichman 190.

Section Schizocalyces

Cyrtandra caudiflora sp. nov. Frutex ramosus est, novellis dense adpresse subbadie pilosulis, petiolis 1.5-6 cm longis dense adpresse adscendente subbadie pilosulis, laminis 14-24 x 6-8.3 cm coriaceis ellipticis acutis basi cuneata marginibus serrulatis supra catenulate hirsutis infra dense adpresse adscendente fulve pilosis nervis secundariis 17 in dimidio quoque, cymis caulifloribus omnino ad basim 6-11 cm longis 5-27-floriferis dense adscendente fulve pilosulis, pedunculo 8-48 mm longo, bracteis 6-8 mm longis oblanceolatis, pedicellis 3-5 mm longis, calycibus (siccatis) 11-12 mm longis adpresse fulve pilosulis lobis 9-11 x 2-3 cm oblanceolatis, corollis (siccatis) 16-17 mm longis albis tubo 11-12 mm longo parte 2/5 apicali decurvata, lobis hirsutis eis superis 4 mm longis late ellipticis, loba infera 6.5 mm longa late elliptica, baccis 11 x 7 mm ellipsioides. Holotypus: Molokai I., Wailau Valley, woods, 2,500 ft. alt., July 4, 1932, H. St. John et al. 13,274.

Cyrtandra disgrega sp. nov. Frutex ramosus 2.7 m altus est, novellis dense badie hirsutis, foliis inaequalibus, petiolis 25-40 mm longis badie hirsutis, laminis 9.5-14 x 4.1-7 cm chartaceis late ellipticis acuminatis basi anguste cuneata marginibus grosse serratis supra remote adpresse pilosis infra adscendente puberulis nervis secundariis 5-6 in dimidio quoque, cymis 4 cm longis 1-3-floriferis dense adscendente badie hirsutis, pedunculis 1 cm longis, pedicellis 11-16 mm longis, bracteis 20 mm longis anguste lanceolatis, calycibus (siccatus) 15-17 mm longis tubo 4 mm longo in basi hirsuto alibi sparse ita, lobis superis 9 mm longis ligulate lanceolatis hirsute ciliatis lobis inferis 10 mm longis, corollis longioribus. Holotypus: Hawaii I., Nanawale, ohia forest, 550 ft. alt., Feb. 1987. W. Takeuchi & C. Imada 3,414.

Cyrtandra hanaensis sp. nov. Frutex est, rama foliosa adscendente puberula, petiolis 2-3.5 cm longis adscendente puberulis, laminis 11.5-13 x 5-5.7 cm coriaceis ellipticis acutis basi inaequaliter cuneata marginibus serrulatis supra adscendente puberulis et densiore in midnervo infra in superficie minute puberulis sed in nervis adscendente puberulis nervis secundariis 9-11 in dimidio quoque, cymis 4.5-6.5 cm longis 5-7-floriferis adscendente puberulis, pedunculis 15-21 mm longis, bracteis 15-17 mm longis lanceolatis, pedicellis 7-14 mm longis, calycibus (siccatis) 15-19 mm longis dense adscendente puberulis lobis 13-16.5 mm longis anguste lineari-lanceolatis, corollis (siccatis) albis 18 mm longis tubo 12 mm longo adscendente pilosulo, lobis superis 5 mm longis ovatis, loba infera 7 mm longa late ovata. Holotypus: east Maui, rim of Kipahulu, forest, 6,225 ft. alt., 29.VI.1973, Betsy Harrison 286.

Cyrtandra hylematos sp. nov. Frutex 7-10 dm altus est, novellis adscendente badie hirsutulis, petiolis 2-3 cm longis adscendente badie hirsutulis, laminis 6.5-14.5 x 3-4.7 cm chartaceis ellipticis acuminatis basi cuneata vel decurrenti marginibus minute serrulatis supra adscendente badie pilosis infra cum pilis simulantibus nervis secundariis 5-7 in dimidio quoque, cymis 3-3.5 cm longis 3-floriferis adscendente badie hirsutis, pedunculo 10-15 mm longo, bracteis 17-25 mm longis lanceolatis, gemmis campanulatis, calycibus (siccatis) 10 mm longis adscendente badie hirsutulis tubo 4 mm longo, lobis superis 4 mm longis lanceolatis, illis inferis 6 mm longis, corollis (siccatus) 14-15 mm longis albis sparse adscendente badie pilosulis, tubo 9 mm longo, lobis superis 3 mm longis suborbicularibus, loba infera 4.5 mm diametro suborbiculari. Holotypus: Hawaii I., Nanawale, forest, Feb. 1987, Wayne Takeuchi & C. Imada 3,412.

Cyrtandra infera sp. nov. Frutex est, rama foliosa adscendente badie pilosula, petiolis 12-52 mm longis adscendente badie pilosulis, laminis 7.5-12.5 x 2.2-5.4 cm chartaceis oblanceolatis acuminatis basi cuneata marginibus serrulatis supra catenulate subbadie hirsutulis et densiore in midnervo infra sparse subbadie pilosulis nervis secundariis 9-11 in dimidio quoque, cymis 2.5 cm longis 1-floriferis, pedicellis 12 mm longis adscendente subbadie pilosulis, calycibus (siccatis) 11-12 mm longis sparse pilosulis lobis 9-9.5 x 3.5 mm lanceolatis, corollis 13-14 mm longis albis tubo 9 x 3 mm. Holotypus: Hawaii I., Lower Nanawale Forest Reserve, forest, 300 ft. elev., 2-28-78, Lisa K. Croft 790240.

Cyrtandra kalamanche sp. nov. Frutex 2 m altus est, novellis adpresse adscendente fulve pilosulis, petiolis 2-5.5 cm longis adpresse adscendente fulve pilosulis, laminis 7-19.5 x 2.5-5.5 cm subcoriaceis ellipticis acuminatis basi deminuenti marginibus serrulatis supra catenulate hirsutulis infra adpresse adscendente fulve pilosulis nervis secundariis 11-15 in dimidio quoque, cymis omnino ad basim 4-7 cm longis 1-3-floriferis adpresse adscendente fulve pilosulis, pedunculo 12-17 mm longo, bracteis 5-7 mm longis lanceolatis, pedicellis 12-22 mm longis, calycibus (siccatis) 12-13 mm longis dense adpresse adscendente fulve pilosulis lobis 11-12 mm longis oblancei-linearibus, corollis (siccatis) 24 mm longis tubo 18 mm longo midnervis et fauce pilosulis, lobis pilosis, lobis superis 7 mm longis suborbicularibus, loba infera 9 mm longa suborbiculari. Holotypus: Molokai I., Waikolu Valley, Hanalilolilo, 3,800 ft. alt., Dec. 21, 1932, H. St. John et al. 12,419.

Cyrtandra kauensis sp. nov. Frutex 1 m altus est, novellis badie pilosis, foliis inaequalibus, petiolis 1.5-7.5 cm longis vix pilosis, laminis 7-20 x 3.3-10 cm chartaceis late ellipticis acuminatis basi cuneata marginibus serratis supra catenulate hirsutulis infra subalbis et in nervis pilosulis nervis secundariis 9 in dimidio quoque, cymis 4 cm longis 3-floriferis badie pilosis, pedunculo 17 mm longo, bracteis 17 mm longis lanceolatis, pedicellis 11-12 mm longis, calycibus (siccatis) 12-13 mm longis in basi dense badie pilosis sed ad apicem pilis rarioribus tubo 5-6 mm longo labia supera 7 mm longa 3 lobis lineari-lanceolatis lobis inferis 8-9 mm longis, corollis (siccatis) 16 mm longis tubo 13-14 mm longo sparse pilosulo, lobis superis 2 mm longis suborbicularibus, loba infera 3 mm longa suborbiculari. Holotypus: Hawaii I., Ka'u Dist., Kiolaka'a-Kea'a Homestead Addition, Metrosideros forest, 2,300 ft. alt., May 28, 1981, J. Davis 502.

Cyrtandra kormanthike sp. nov. Frutex est, ramis puberulis, petiolis 10 mm longis puberulis, laminis 3.5-5.5 x 1.5-1.8 cm coriaceis ellipticis acutis basi cuneata marginibus serrulatis supra sparse catenulate hirsutis infra dense adpresse adscendente fulve pilosulis nervis secundariis 9 in dimidio quoque, cymis caulifloribus fere omnino ad basim 2-4.5 cm longis 1-5-floriferis dense adpresse adscendente fulve pilosulis, pedunculis 5-20 mm longis, bracteis 5 mm longis oblanceolatis, pedicellis 7-15 mm longis, calycibus (siccatis) 10-12 mm longis pilosulis lobis 8.5-10.5 x 3-4.3 mm oblanceolatis, corollis (siccatis) 24-25 mm longis pilosulis tubo 7 mm long, lobis superis 5.5 mm longis ovati-suborbicularibus,

loba infera 9 mm longa late elliptica. Holotypus: Molokai I., head of Wailau Valley, rain forest, 900 m alt., 12/29/1936, F. R. Fosberg 13,375.

Cyrtandra pentenourou sp. nov. Frutex 3.3 m altus ramosus est, novellis dense adpresse pilosis, petiolis 5-27 mm longis dense adpresse adscendente pilosulis, laminis 1.6-12 x 1-4 cm chartaceis oblanceolatis varie ellipticis acuminatis acutisve basi cuneata et decurrenti marginibus integribus vel minute serrulatis supra pilosulis infra pallidioribus minute puberulis nervis principalibus adscendente pilosulis nervis secundariis 7-12 in dimidio quoque, cymis 3-5 cm longis 1-floriferis dense adpresse adscendente pilosulis, pedunculo 7-11 mm longo, bracteis 3 mm longis linearibus, pedicellis 11-18 mm longis, calycibus (siccatis) 11-12 mm longis lobis 10-11 mm longis oblanceolatis adscendente pilosulis, corollis (siccatis) 12 mm longis dense adscendente pilosis, lobis superis 2.3 mm long ovatis acutis, loba infera 2.5 x 2.3 mm late ovata acuta, baccis rostratis. Holotypus: Kauai I., Limahuli Valley, stream bed, 600 ft. elev., July 9, 1979, S. Perlman & C. Wichman 464.

Cyrtandra prolixa sp. nov. Frutex est, novellis adpresse badie pilosis, foliis inaequalibus, petiolis 0.7-5 cm longis adscendente badie pilosis, laminis 2.8-11.7 x 1.5-4.5 cm chartaceis ellipticis subacuminatis basi cuneata breve decurrenti marginibus remote apiculate serrulatis supra adpresse adscendente pustulate hirsutulis et densiore in midnervo infra pallidioribus badie pilosis nervis secundariis 9 in dimidio quoque, cymis 22 mm longis 1-floriferis dense adscendente badie pilosulis, pedicello 14 mm longo, calycibus (siccatis) 8 mm longis adscendente badie pilosulis lobis 6-7 x 2-2.2 mm oblongis subacutis, corollis 11 mm longis tubo 7.5 x 2.5 mm pilosulis, lobis superis 3 mm longis ovatis, loba infera 4 mm longa ovata. Holotypus: Hawaii I., Kona, Lower Nanawale Forest Reserve, Transect E, 22.III.1979, L. Cuddihy 790054.

Cyrtandra vallearularis sp. nov. Frutex est, ramis foliosis puberulis, petiolis 25-55 mm longis puberulis, laminis 5.5-13 x 2.7-5.5 cm coriaceis ellipticis subacuminatis basi cuneata decurrentique marginibus serrulatis supra catenulate hirsutulis infra dense adscendente fulve pilosulis nervis secundariis 11-13 in dimidio quoque, cymis axillaribus et caulifloribus 3-6 cm longis 1-5-floriferis dense adscendente fulve pilosulis, pedunculis 18-25 mm longis, bracteis 15 mm longis lanceolatis, pedicellis 8-20 mm longis, calycibus (siccatis) 17-19 mm longis dense adpresse adscendente fulve pilosulis, lobis 14.5-16 mm longis oblanceolatis, corollis 20-23 mm longis tubo 15 mm

longo pilosulo loba infera 5 x 5.5 mm oblate suborbiculari. Holotypus: Molokai I., Olokui, Waialele Stream, 3,600 ft. alt., Feb. 4, 1948, H. St. John & R. L. Wilbur 23,249.

Section Verticillatae

Cyrtandra infraligulata sp. nov. Frutex est, caule adpresse adscendente puberulo, foliis 5-verticillatis sessilibus, laminis 28-43 x 5.3-8.3 cm chartaceis oblanceolatis sed quarto basali 1-4 mm lato ligulato apice acuto marginibus serrulatis supra midnervo et secundariis adpresse adscendente puberulis infra in nervis subpilosulis nervis secundariis 23-25 in dimidio quoque, cymis 2-3.5 cm longis 5-7-floriferis, pedunculo 1-2 mm longo, bracteis 7 mm longis ovatis, calycibus (siccatis) 10-11 mm longis ellipsoideis aliter glabris sed in labiis puberulis, labia supra 4 mm longis cum 3 lobis 1 mm longis deltoideis, lobis inferis 4 mm longis late lanceolatis, corollis puberulis. Holotypus: Molokai I., Kaluaaha Valley, Aug. 1912, C. N. Forbes 308a.Mo.

Cyrtandra manukaensis sp. nov. Frutex 1.3 m altus ramosus est, ramis foliosis adpresse adscendente pilosulis, foliis 3-verticillatis sessilibus, laminis 26-30.5 x 4-5 cm subcoriaceis oblanceolatis acuminatis tertia basali subligulata 15-17 mm lata marginibus grosse serrulatis supra remote adpresse pilosis midnervo adpresse piloso infra adpresse adscendente pilosulis et in nervis principalibus densiore, cymis 2.5-3.5 cm longis floribus compluribus condensatis, gemmis (vivis) 20-22 x 7 mm oblancei-fusiformibus adpresse puberulis rostro 3-5 mm longo, calycibus 22 mm longis adpresse puberulis deciduis 3 lobis lanceolatis, corollis 29 mm longis puberulis lobis intra glandulose puberulis labia supra 4 mm longa cum lobis 3 mm longis loba infera elliptica, ovario puberulo. Holotypus: Hawaii I., Kau, Manuka, forest, 2,400 ft. elev., May 28, 1981, H. Horiuchi ESP-318.

Cyrtandra trifoliata sp. nov. Frutex est, novellis badie adscendente pilosis, foliis 3-verticillatis, petiolis 10-20 mm longis adscendente badie pilosis, laminis 4-6 x 1-1.6 cm coriaceis anguste fusiformibus acutis basi cuneata marginibus compresse serrulatis supra glabris infra in superficie glabris sed midnervo et secundariis sparse adscendente badie pilosulis nervis secundariis 5-6 in dimidio quoque, cymis 2.5 cm longis 1-floriferis sparse adscendente badie pilosulis, pedunculo 1 cm long, bracteis 4 mm longis lanceolatis, pedicellis 7 mm longis, calycibus 12 mm longis fusiformibus remote adpresse pilosulis 2 lobis superis 4 mm longis lanceolatis, 2 lobis inferis 4 mm longis ovatis acutis, corollis

(siccat) 21 mm longis tubo glabro lobis pilosis.
Holotypus: Molokai I., U.S.F.W.S. Bird Survey, Transect 17, Station 15-16, above Halawa, 2,660 ft. elev., 21 July 1979, L. Stemmermann 3,966.

Cyrtandra tripla sp. nov. Frutex 75-100 cm ramosa est, ramulis foliosis puberulis, foliis 3-verticillis sessilibus, laminis 21-30 x 4.5-5.5 cm subcoriaceis tertia basali 2 cm lata integra parte apicali fusiformi acuminata basi rotundata marginibus minute adpresse apicule serrulatis supra microscopice puberulis midnervo puberulo infra glabris sed nervis principalibus adscendente badie pilosulis nervis secundariis 19 in dimidio quoque, cymis 25 mm longis 3-floriferis, pedicellis 4-8 mm longis pilosulis, gemmis 22 mm longis subglabris fusiformibus rostro 3 mm longo, lobis 7 mm longis lanceolatis corollis glabris exsertis, ovario pilosulo. Holotypus: Hawaii I., mauka of Manuka State Park, 1,950 ft elev., June 25, 1975, F. R. Warshauer & C. Lamoureux 322.

Cyrtandra trisse sp. nov. Frutex 1.3 m altus est, ramula foliosa dense adscendente puberula, foliis 3-verticillatis sessilibus, laminis 33.8 x 8.3 cm chartaceis parte 3/4 apicali elliptica parte basali oblonga basi rotundata subacuminata marginibus remote umbonate serrulatis supra glabris sed nervis principalibus adpresse puberulis infra glabris sed nervis principalibus adscendente puberulis nervis secundariis 19 in dimidio quoque, cymis 3-4.5 cm longis 2-5-floriferis adpresse adscendente puberulis, pedunculo 2-3 mm longo, bracteis 3-4 mm longis orbicularibus, pedicellis 8-12 mm longis, gemmis 22 x 6-7 mm corpore oblancei-ellipsoideis cum rostro 5 mm longo, calycibus(vivis) 26 mm longis deciduis fissis in 2 lobis 14 mm longis lanceolatis, corollis 30 mm longis tubo 15 mm longo glabris, labia supera cum 2 lobis 10 mm longis suborbicularibus, loba infera 12 x 8 mm ovata, baccis 19 x 12 mm ellipsoideis. Holotypus: west Maui, Iao Valley, Nakaluloa Stream, 2,800 ft. alt., Oct. 16, 1980, R. Hobby 913.