Cyrtandra rotumaensis (Gesneriaceae) of Rotuma Island
Pacific Plant Studies 201

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THE GENUS Cyrtandra extends from Malay to eastern Polynesia, and includes some 600 species. The writer in 1938 made collections of the flora of Rotuma Island, an isolated, low, volcanic island that is situated about 300 miles north of the Fiji Archipelago. Only one species of Cyrtandra was discovered there, but it was notable in being a halophyte and in being poisonous. The nearest high land is in Fiji, so it is not surprising that the closest relative of the Rotuman species is one found in Fiji.

Cyrtandra rotumaensis sp. nov.

Figs. 1, 2

NOM. VERN.: "mone" (Rotuman language).

DIAGNOSIS HOLOTYPE: Frutex 2 m altus est, ramis 10–13 mm diametro tetragonis max glabratris et eis vetustioribus laevibus lucidis pallide bruneis partibus exterioribus subcarnosis et in sicco contractcis et fugis longitudinalibus formantis, caticricibus foliis connatis et perfoliatis 6–7 mm altis obcordati-scutelliformatis cum lateribus connatis ligululis obscure bruneinse tarde pallide brunneis, fasciculis 9, novellis dense hinule-coloratis divergentibus catenulatis villosulis, ramulis foliosis tetragonis minus villosulis, ramulis foliosis tetragonis minus villosulis, internodis 10–83 mm longis, foliis oppositis in 2–4 nodis adscendentibus non congregate inaequilibus uno 1/10–1/4 minori, petiolis 3–8 cm longis dense hinulei-coloratis divergentibus catenulatis villosulis, lamiinis 12–33 cm longis 9.5–18.5 cm latis crassiter chartaceis subcarnosis sed in sicco graciliter chartaceis supra viridibus infra fere albis inconcininis ellipticis vel late ellipticis latere uno latiori et longiori apice subacuto basi inaequaliter decurrenti supra separitier adpressae catenulatis villosulis et quando vetustis remote villosulis infra in juvente densiter hinulei-coloratis divergentibus catenulatis villosulis sed minus quando vetustioribus nervis lateralisbus 6–8 in dimidio quoque adscendentibus tum curvatis adscendentibus et proxima marginem sursum curvatis et interconnectis, cymis 5–9-floriferis in flore ex axillibus foliosis sed in fructu ex 1–2 nodis nudis, pedunculo 8–10 mm longo divergenti et pedicellis bracteis calycibusque densiter hinulei-coloratis divergentibus catenulatis villosulis, pedicellis 5–10 mm longis gracilibus cum bracteis oppositis apicalibus 2–5 mm longis lanceolatis, alabastris ovoidibus cum rostro lanceolato, calycibus 8–10 mm longis post florescentibus deciduis viridibus intra glabris extra densiter albi-puberulis tubo hemisphaericum 1.5–2 mm alto limbo bilabiato intra labias binas 7.5–9.5 mm partito, labia supera trilobata lobis 7–9 mm longis et per 6–8 mm partitis concavis angustis ovatis apice lanceolato, labia infera bilobata lobis 7–9 mm longis concavis inconcinnis ellipticis acutis, corolla 11–11.5 mm longa alba extra glabra tubo 7–7.5 mm longo recto in basi 3.5 mm diametro in medio 3 mm diametro in orifice 4.5 mm diametro, limbo bilabiato et inter labias 5 mm partito 5-labata, labia supera bilobata lobis 3 mm longis 4 mm latis obliqui semiericuliculrias in et proxima orem capitati-glandulosi-puberulentis, labia infera trilobata lobis binis lateralisbus 4–5 mm longis 3.5 mm latis semiiericuliculrias cum pilis simulantibus, loba infera 3.5 mm longa 3 mm lata suborbicularius cum pilis simulantibus, 2 staminibus inferis perfectis et cum filamentos in tubo adnato usque ad 2 mm ex ore parte libera 2 mm longa tereta spiralliter adscendentis, antheris binis perfectis 1.3 mm longis 0.8 mm latis fere concinnis ovatis, connovito 3.5 mm lato lanceolato obscuro, staminodeis binis lateralisbus usque ad 1.5 mm ex ore cum tubo adnatis parte libera filamentos 0.5 mm longa filamentosa, apice antheroidea 0.1 mm longa vadose convexa, staminodia supero usque ad 2.2 cm ex ore cum tubo adnatis parte libera filamentae 1 mm longa filamentosa, apice antheroidea 0.1 mm alta convexa pallida, ovario

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Fig. 1. *Cyrtandra rotumaensis* St. John. a, Habit, $\times \frac{1}{2}$; b, bud, $\times 1$; c, d, flower, $\times 1$; e, pistil, $\times 2$; f, berry, $\times 1$. 
**Cylandra rotumaensis** St. John, holotype, on cliff at Motusa, Rotuma Island.

2–3 mm longo lanceoloideo glabo in basi cum disco cupulato 0.7 mm alto cinceto, stylo 2 mm longo capitati-glandulosi-puberulento, lobis binis stigmatis 1.5 mm longis suborbicularibus et in latere proximali in tertia infera connata, bacces 12–13.5 mm longis 5–5.5 mm diametro nudis albis lanceoloideis laevibus, seminibus 0.27–0.36 mm longis 0.16–0.17 mm diametro late ellipsoidis rubri-brunneis sed apicibus umbonatis obscure brunneis in superficie cum reticulis cellulosis elevatis hexagonalibus et fere 4 in linea quoque.

**DIAGNOSIS OF HOLOTYPE:** Shrub 2 m tall; stems 10–13 mm in diameter, tetragonal, soon glabrate and the older smooth, shining, tawny, the outer layers somewhat fleshy, and on drying shrinking to form longitudinal ridges; leaf scars connate and perfoliate, 6–7 mm high, obcordate shield-shaped and with ligulate connections, dark brown, then soon tawny; bundle scars 9; young shoots densely tawny spreading catenulate villosulous; leafy branchlets 4-sided, the villosity more sparse; internodes 10–83 but usually about 15 mm long; leaves opposite, in 2–4 pairs, ascending, not crowded, unequal, one of each pair being 1/10–1/4 the smaller; petioles 3–8 cm long, densely tawny spreading catenulate villosulous; blades 12–33 cm long, 9.5–18.5 cm wide, thick chartaceous, somewhat fleshy, but when dried becoming thin chartaceous, green above, whitish beneath, asymmetric elliptic or broadly so, one side being distinctly broader and longer, the apex subacute, the base unequally decurrent, above spaced appressed catenulate villosulous, more remotely so in age, below when young densely tawny spreading catenulate villosulous, but in age moderately so, the lateral veins 6–8 on a side, ascending, then curved ascending, and near the margin upcurved and interconnected; cymes 5–9-flowered, from the leafy axils when in flower, but from 1–2 naked nodes when in fruit; peduncle 8–10 mm long, diverging, it, pedicels, bracts, and calyx densely tawny spreading catenulate villosulous; pedicels 5–10 mm long, slender; the paired bracts at the apex of the peduncle 2–5 mm long, lanceolate; buds ovoid with a lanceoloid beak;
**Expanded Description:** Blades 9.5–20 cm wide.

**Holotypus:** Pacific Ocean, Rotuma Island, 12°30' S. Lat., 177°05' E. Long., Motusa, Itutiu Dist., moist forest on rocks near shore, 15 ft alt., June 30, 1938, H. St. John 18,997 (BISH). (Isotypes will be sent to A, K, L, P, SUVA, UC).

**Specimens Examined:** Pacific Ocean, Rotuma Island, Solnahu Island, moist woods on ridge, 150 ft alt., Aug. 18, 1938, St. John 19,535 (BISH); Solkope Island, crevices of basalt sea cliff, 10 ft alt., Aug. 24, 1938, St. John 19,707 (BISH); Haau Meamea Island, moist shaded sea cliffs, 20 ft alt., Aug. 1, 1938, St. John 19,373 (BISH); Uea Island, in moist crevices of basalt sea cliff, 10 ft alt., Aug. 22, 1938, St. John 19,662 (BISH).

The last four collections were made on offshore islets. Only one collection, a large one with several duplicates, was made on the main island, Rotuma, but the species was also observed and noted at eight other localities. These were Kilinga, Losa, Soloroa, Pepjei, Solmatcha, Lulu, Paho, and on Hauatia Island, another offshore islet.

The species is unusual in often growing on exposed sea cliffs, as low as 10–20 feet altitude, in easy reach of salt spray, and is thus a halophyte. It also grows inland in nonsaline, moist forests to at least 150 feet altitude, and I think even higher.

The plant has another property unique in the genus, that of being poisonous. It was recorded in field notes that the herbage, if touched when wet, causes a red skin rash which is very painful and lasts for one day.

*C. rotuanaensis* is most closely related to *C. Tempesti* Horne ex C. B. Clarke, of Taveuni Island, Fiji, a species with the inflorescence densely ferruginous, appressed pilosulous; pedicels 10–20 mm long; buds with the lower half ellipsoid, the upper part a stout beak; calyx 10–12 mm long, white, the 3 upper calyx lobes linear lanceolate; corolla 20 mm long; the 2 upper lobes of the corolla 5.5 mm wide; style glabrous; and the leaf blades 15–24 cm long, 8.5–10 cm wide, ovate elliptic. *C. rotuanaensis* has the inflorescence divergent tawny catenulate villosulous; pedicels 5–10 mm long; buds ovoid, with a beak shorter than the body; calyx 8–10 mm long, green, its 3 upper lobes narrowly ovate with a lanceolate tip; corolla 11–11.5 mm long, the 2 upper lobes of the corolla 4 mm wide; style capitate glandular puberulent; leaf
blades 12–33 cm long, 9.5–20 cm wide, asymmetric elliptic or broadly so.

This new species is a member of the subgenus *Cyrtandra*. It does not fit into any of the sections known in Hawaii. As the large genus has not been divided into satisfactory sections, *C. rotumaensis* is not as yet assigned to a section. However, as presented by Gillett (1967, p. 117) it would fit in his Group 4 which includes five Fijian species. Of these the most similar one is *C. Tempesti* Horne ex C. B. Clarke, of Taveuni Island, Fiji.

The new epithet is formed from the name of the type locality, Rotuma, and *-ensis*, the Latin adjectival place ending.

**LITERATURE CITED**