

plurinervia, dorso puberula, 8-10 mm. longa, 3.5-4.5 mm. lata; stamina numerosa, parva, oligadelpha, filamentis in tubum ca. 7 mm. longum coalitis; stylus tubo staminali aequilongus, stigmate subcapitato 5-lobulato extruso; capsula 8-10 mm. longa.

COSTA RICA: straight-trunked, gray-barked trees 120 feet in height, the trunk about 30 inches in diameter, with open, spreading, rather flat-topped crowns, calyx varies in color from pinkish to reddish brown. Occasional on steep slopes, forested hills above Palmar Norte, Province of Puntarenas, December 10, 1951, alt. 450 m., Paul H. Allen 6326 (TYPE in Herb. Escuela Agrícola Panamericana).

We take pleasure in naming the species for Dorothy Allen, the collector's charming wife, who has illustrated this genus and many other plants for the pages of our journal.

Duplicate specimens, from the abundant material sent by Mr. Allen, will be distributed to Chicago Natural History Museum, the Gray Herbarium, United States National Herbarium, the British Museum (Natural History) and to others.

STANDLEYACANTHUS, A NEW GENUS OF ACANTHACEAE FROM COSTA RICA

EMERY C. LEONARD

AMONG the specimens of Acanthaceae available for study when I was preparing an account of the family for the Flora of Costa Rica (Field Mus. Bot. 18: 1188. 1938) were two collected by Paul C. Standley (Nos. 37026 and 37144) and another by Standley and Valerio (No. 46204). Lacking corollas except those of extremely immature flower buds, I was unable to name them at that time. Recently, however, Louis O. Williams kindly sent me a portion of Allen's N° 6297 possessing two mature flowers. With this additional material I was able to complete my study of the plants in question. They represent, apparently, a new genus and species.

***Standleyacanthus* Leonard, gen. nov.**

Herbae, caulibus erectis vel ascendentibus; laminæ foliorum ovata, lanceolata vel oblongo-elliptica, breviter petiolata, cystolithis prominentibus; spicae terminales, breviter pedun-

culatae, bracteis aliquando magnis, tenuibus, viridibus, ellipticis vel suborbiculatis, bracteolis parvis, lanceolatis; calyx parvus, segmentis 5, acutis; corolla parva, bilabiata, labiis subaequalibus, labio superiore apice minute bidentato, dentibus obtusis, labio inferiore trilobato, lobis apice rotundatis; stamina 4. antheris staminarum superiorum 1-locularibus, antheris staminorum inferiorum 2-locularibus, loculis superpositis; stigma bilobatum; capsulae clavatae, semina 4, reticulata, plana, brunnea, plus minusve rugosa.

The spikes of *Standleyacanthus* are somewhat suggestive of those of *Blechum*, but the flowers, unlike those of *Blechum*, are unique in having the upper pair of stamens with unilocular anthers and the lower or longer pair with bilocular anthers, the lobes strongly superposed. *Chamaeranthemum*, represented in Costa Rica by 2 species, is also characterized by 1- and 2-celled anthers within the same corolla, but in that genus the bracts are very small and subulate in contrast to the relatively large elliptic or suborbiculate bracts of *Standleyacanthus*.

***Standleyacanthus costaricanus* Leonard, sp. nov.**

Herba, caulis erectis vel ascendentibus, subquadrangularibus, glabris vel plus minusve bifariam hirtellis, pilis curvatis, subadpressis, cystolithis parallelis; lamina foliorum ovata, lanceolata vel oblongo-elliptica, acuta vel breviter acuminata, aliquando firma, integra vel undulata, atrovirens (*sicca*), supra glabra, minute (sub lente) alveolata, cystolithis pluribus, setiformibus, subtus glabra, costa et venis lateralibus prominentibus, hirtellis; petioli hirtelli, pilis saepe purpureis; spicae ovatae, dense vel (*maturaæ*) laxae; pedunculi graciles, glabri; rhachis glabra vel parce hirtella; bracteae ellipticae vel rotundatae et subapiculatae (vel ca. ad apice spicae acutae), basi angustatae, integrae, glabrae vel plus minusve hirtellae, marginibus ciliatae; bracteolae anguste lanceolatae, acutae, glabrae, ciliatae; calycis segmenta anguste triangularia, acuta, glabra vel apice hirtella; corolla parva, alba (labiis purpureo-maculatis), glabra vel extus sursum parce hirtella, intus deorsum pilosa, tubo subcylindrico, labiis subaequalibus, labio superiore ovato, apice minute bidentato, dentibus obtusis, labio inferiore trilobato, lobis oblongis, rotundatis; stamna inclusa vel vix exserta, antheris duobus posterioribus unilocularibus,

anterioribus bilocularibus, loculis superpositis, muticis; capsulae clavatae, glabrae vel apice hirtellae; retinacula fere recta, apice truncata vel rotundata, tenuia; semina plana, brunnea, leviter asperata.

Erect or ascending herbs up to 1 meter high; stems moderately branched, subquadrangular, green, glabrous or hirtellous, the hairs usually curved and subappressed, up to 0.2 mm. long, more or less disposed in two lines, the cystoliths numerous, parallel, about 0.2 mm. long; internodes up to 11 cm. long; nodes somewhat swollen; leaf blades ovate-lanceolate to oblong-elliptic, up to 11 cm. long and 4 cm. wide, acute to short-acuminate (the tip itself obtuse), narrowed at base, moderately firm, entire or undulate, drying dull green, the upper surface glabrous, minutely alveolate under a lens, the cystoliths numerous and conspicuous, bristle-shaped, up to 0.2 mm. long; the lower surface glabrous except the costa and lateral veins (10 to 12 pairs), these prominent and hirtellous with small curved hairs; petioles up to 1 cm. long, hirtellous with small curved subappressed hairs, these often purplish; spikes ovate, usually up to 4 cm. long and 3.5 cm. wide, truncate at tip, becoming rather lax with age, the peduncles slender, 5 to 10 mm. long, these and the rachises glabrous or rather sparingly hirtellous; bracts elliptical, rounded to obtuse and subapiculate or those toward the tip of the spike acute, narrowed to a short clawed base, thin, green, entire, glabrous or more or less hirtellous, the margins ciliate with hairs up to 0.5 mm. long, the cystoliths rather prominent but less so than on the upper surface of the leaf blades; bractlets lanceolate, 4.5 mm. long, 0.75 mm. wide, acute, glabrous, the costa and a pair of lateral nerves inconspicuous; calyx 3.5 mm. long, glabrous, deeply segmented, the segments narrowly triangular, 3 mm. long and about 0.75 mm. wide at base, acute, glabrous or hirtellous at tip, the costa faint; corolla 10 mm. long, white, the lip marked with dark lavender (Allen), glabrous or sparingly hirtellous at tip without, the basal portion pilose within, the hairs straight, spreading or slightly retrorse, up to 0.5 mm. long, white, the tube about 3 mm. long, subcylindric, the lips subequal, the upper lip ovate, 3.5 mm. wide at base, minutely bidentate at tip, the teeth obtuse, the lower lip 3-lobed, the lobes oblong, about 2 mm. long and 1 mm. wide, rounded: stamens included or barely exserted, the posterior pair 2 mm. long, 1-



Standleyacanthus costaricanus. (a, Standley 37026; b-g, Allen 6297): a, tip of the plant to show spike and leaf blade; b, c, bractlet; d, calyx; e, corolla; f, tip of the posterior lip of the corolla; g, a posterior stamen (1-celled anther) and an anterior stamen (2-celled anther). Approximate magnifications: a, X2; b-e, X4; f, X20; g, X10.

celled, the anterior pair 3 mm. long, 2-celled, the cells parallel but superposed, these and the anthers of the upper pair of stamens about 1 mm. long and 0.3 mm. broad, muticous, the filaments glabrous or those of the anterior pair bearing scattered blunt papilliform hairs or protrusions; stigma 13 mm. long, 2-lobed, the style glabrous toward tip, minutely hirtellous