

STUDIES IN THE EUPATORIEAE (ASTERACEAE) LXXIX.

A NEW GENUS, ASANTHUS.

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The genus Asanthus described here represents three species of two rather distinctive types. A critical comparison with members of related genera is particularly instructive.

The new genus Asanthus seems closest to Steviopsis but can be distinguished by the sessile leaves, the presence of glands on the outer surface of the corolla lobes, the four or more series of phyllaries, the less distinct anther collars, the lack of glands on the achenes, the very narrow raised ribs on the achenes and the distinct carpodia of small rather thick-walled cells. The genus also lacks the mottled reddish coloration of the stem that occurs in Steviopsis.

The many series of phyllaries are reminiscent of Dyscritogyne but the latter is distinct in its much shorter corolla lobes and the fusiform 5-ribbed achenes bearing many long-stalked glands.

The genus Asanthus does have a resemblance to the related genus Brickellia, especially comparing A. squamulosus (Gray) R.M.King & H.Robinson to Brickellia spinulosa Gray. In superficial characteristics the last two seem closely related, both having the strobilus-like clusters of reduced leaves in the leaf axils and below the involucre. In reality A. squamulosus is distinct by the lack of the hirsute stylar node, the more reduced carpodium, the narrower raised costae on the sparsely setiferous achene and the great number (75-100) of much finer less scabrous pappus setae. In all these features except the pappus structure, A. squamulosus is like the other species of Asanthus and different from most Brickellia. The occurrence of the squamulous condition in a rather unrelated species of Brickellia lessens the inclination to value the characteristic very highly but A. squamulosus is still very distinctive in the form of its pappus which is distinctly in 2-3 rows, and the species could easily be subgenerically distinct from A. thrysiflora and A. solidaginifolia.

The two species A. thrysiflora and A. solidaginifolia have never been compared previously though

they are obviously related. The former species known from San Luis Potosi seems to differ only by a somewhat longer involucre from the latter species of Chihuahua, Coahuila and Durango.

Asanthus R.M.King & H.Robinson, genus novum Asteracearum (Eupatorieae). Plantae suffrutescentes erectae multo ramosae. Folia inferne opposita sessilia anguste lanceolata vel linearia integra, utrinque glandulifera, superne opposita vel alterna, interdum squamulosa, in glomerulis dense imbricata. Inflorescentiae paniculatae, ramis ad apicem dense corymbosae. Involucris squamae ca. 20-25 interdum in foliis squamulosis imbricatis numerosis continuae imbricatae vel subimbricatae valde inaequilongae, 4-seriatae vel plus, oblongae; receptacula plana glabra. Flores 8-14 in capitulo; corollae tubulares vel anguste infundibulares, lobis distincte longioribus quam latioribus extus pauca glanduliferis; filamenta antherarum in parte superiore non incrassata, cellulis indistinctis, parietibus transverse annulate ornatis; appendicibus $1\frac{1}{8}$ - $1\frac{1}{2}$ longioribus quam latioribus; styli inferne non nodulosi, glabri, appendicibus longe clavatis laevibus; achaenia longe prismatica ca. 10-costata, costis angustis parce breviter setiferis; carpodia breviter operculiformia, cellulis parvis subquadratis vel breviter oblongis, parietibus aliquantum incrassatis; pappus setiformis 1-3-seriatus, setis 20-100, varie scabris superne non dilatatis, cellulis apicalibus argute acutis.

Species typica: Brickellia squamulosa A. Gray

Our studies of the genus indicate that it contains the following three species.

Asanthus solidaginifolius (A.Gray) R.M.King & H.Robinson, comb. nov. Brickellia solidaginifolia A. Gray, Proc. Amer. Acad. 22: 306. 1887. Mexico.

Asanthus squamulosus (A.Gray) R.M.King & H.Robinson, comb. nov. Brickellia squamulosa A.Gray, Proc. Amer. Acad. 15: 30. 1880. Mexico, Southwest United States.

Asanthus thrysiflorus (A.Gray) R.M.King & H.Robinson, comb. nov. Brickellia thrysiflora A.Gray, Proc. Amer. Acad. 15: 30. 1880. Mexico.

This study was supported in part by the National Science Foundation Grant GB 20502 A# 1 to the senior author.



King, Robert Merrill and Robinson, Harold E . 1972. "Studies in the Eupatorieae (Asteraceae). LXXIX. A new genus, *Asanthus*." *Phytologia* 24(2), 65–66.

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