

STUDIES IN THE EUPATORIEAE (ASTERACEAE). CXVI.

NEW SPECIES OF NEOMIRANDEA.

R. M. King and H. Robinson
Smithsonian Institution, Washington, D.C. 20560.

The striking nature of the showy and often epiphytic species of Neomirandea might have been expected to draw more interest and more careful treatment to the group. Unfortunately, the reverse seems to be the case as the true nature of the genus was buried in an unworkable and unnatural concept of Eupatorium. Recent studies in the area from southern Mexico to Panama and especially near Costa Rica where the genus is concentrated, have led to the description of five new species. Now, yet two more undescribed species have been discovered during concentrated studies in preparation for the writing of the Eupatorieae in the Flora of Panama series to be published by the Missouri Botanical Garden.

Neomirandea chiriquensis R.M.King & H.Robinson, sp. nov., Plantae frutescentes ca. 1.5 m altae. Caules teretes subincrassati glabri. Folia opposita breviter vel distincte petiolata, petiolis 5-10 mm longis, laminis late ellipticis vel obovatis 6-11 cm longis 2.5-6.5 cm latis integris coriaceis base late cuneatis ad apicem obtusis utrinque minute glandulopunctatis cetera glabris. Inflorescentiae corymbosae usque ad 20 cm latae 10 cm altae, pedicellis ultimis 5-10 mm longis minute puberulis. Capitula ca. 7 mm longa 3 mm lata. Squamae involucri plerumque lavandulae ca. 15 imbricatae vel subimbricatae ca. 3-seriatae 1.5-5.0 mm longae 0.7-1.0 mm latae lanceolatae vel lineares pauce fimbriatae extus subglabrae; receptacula glabra vel minute spiculifera. Flores 8-10 in capitulo; corollae ca. 4 mm longae anguste infundibulares lavandulae vel purpurascens intus et extus glabrae, lobis late triangularibus parum longioribus quam latioribus, cellulis quadratis, parietibus non sinuosis; appendices antherarum late ovatae; styli inferne non inflati glabri; achaenia prismatica 2.0-2.5 mm longa glabra ad apicem pauce spiculifera; carpodia distincta, cellulis subquadratis 3-5-seriatis; setae pappi ca 40 ad apicem vix scabrae plerumque anguste vel distincte clavatae. Grana pollinis 20-22 μ diam.

Type: Panama: Chiriqui: Vicinity of Boquete, E of Palo Alto. Elevation 5000 ft. Slender shrub ca. 4 ft. tall, all branches of inflorescence red-violet, involucre violet, florets and styles white at anthesis becoming red-violet later. 23 July 1959. W.L.Stern, K.L.Chambers, J.D.Dwyer, & J.E.Ebinger 1086 (Holotype MO!)

The new species is very close to N. allenii R.M. King & H. Robinson, one of the most common species in the lower ranges of central Panama. Distinctions of the new species include the distinctly petiolate leaves, the longer more glabrous phyllaries, the glabrous corolla lobes and the nearly glabrous achenes. In N. allenii the leaves are sessile or nearly so and the phyllaries mostly less than 3 mm long, the corolla lobes and achene have many glands which are mostly very long-stalked.

Neomirandea panamensis R.M. King & H. Robinson, sp. nov., Plantae arborescentes erectae usque ad 13 m altae base incognitae. Caules teretes vel valde striati minute granuloso-puberuli. Folia opposita majuscula longipetiolata, petiolis usque ad 15 cm longis base anguste vel late alatis interdum auriculatis, laminis deltoideis vel aceriformibus grosse dentatis vel vadose lobatis serrulatis ad apicem vix acuminatis base rotundatis vel truncatis 3-5-nervatis ad petiolum anguste cuneatis interdum denticulatis subtus granulose fusco-puberulis. Inflorescentiae corymbosae usque ad 27 cm latae 18 cm altae, pedicellis ultimis minus 1 mm longis. Capitula fasciculata plus 5 mm longa. Squamae involucri fulvae ca. 15 imbricatae 4-5-seriatae ovatae vel oblongae 1-4 mm longae ad apicem late rotundatae fimbriatae extus glabrae; receptacula glabra. Flores 5 in capitulo; corollae ca. 4 mm longae anguste infundibulares lavandulae intus glabrae, tubis extus glanduliferis, lobis oblongo-lanceolatis 3-4 longioribus quam latioribus ad apicem glanduliferis, cellulis quadratis, parietibus non sinuosis; appendices antherarum late ovatae; styli inferne inflati glabri; achaenia inferne glabra superne setifera; carpodia distincta, cellulis subquadratis 4-5-seriatis; setae pappi 45-55? ad apicem vix scabrae. Grana pollinis ca. 25 μ diam.

Type: Panama: Bocas del Toro: Robalo Trail, Northern slopes of Cerro Horqueta. Alt. 6000-7000 ft. Tree 40 ft. Flowers lavender, frequent. August 5-7, 1947. Paul H. Allen 4954 (Holotype MO! Isotype MO!).

The species is related to Neomirandea angularis (B.L.R.) K. & R. and N. burgeri K. & R. with similar palmate leaf blades. The species is distinct from both these closely related species by the great height of the plants, by the prominence of the stipular wings, by the numerous setae on the upper part of the achenes and by the glands on the tube of the corolla. Other distinctions from N. angularis include the less prominent abaxial pubescence on the leaves and the lack of hairs inside the corolla. Additional distinctions from N. burgeri include the lack of large teeth on the distal part of the petiole. The plants show rather immature heads and measurements of some parts remain uncertain.



Figure 1. *Neomirandea chiriquensis* R.M.King & H.Robinson, n. sp. Holotype, MO. Photo by Victor E. Krantz, Staff Photographer, National Museum of Natural History.



Figure 2. Neomirandea chiriquensis R.M.King & H.Robinson, n. sp. Holotype, MO. Enlargement of the Inflorescence. Photo by Victor E. Krantz, Staff Photographer, National Museum of Natural History.



Figure 3. Neomirandea panamensis R.M.King & H. Robinson, n. sp. Holotype, MO. Photo by Victor E. Krantz, Staff Photographer, National Museum of Natural History.



Figure 4. Neomirandea panamensis R.M.King & H. Robinson, n. sp. Holotype, MO. Enlargement of the Inflorescence. Photo by Victor E. Krantz, Staff Photographer, National Museum of Natural History.