

GEOPHILA (RUBIACEAE)

IN

NORTH AMERICA

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In the preparation of an account of *Geophila* for the Flora of Guatemala it was found necessary to study all of the North American material and to correlate it with the South American collections. *Geophila* is a genus of lowland species and as might be expected they are often wide ranging. Most of the North American material has been called *Geophila herbacea* (Jacq.) Schum. (= *G. repens* (L.) I. M. Johnston) and it is true that ours are all closely allied. The four species reported here are all known in South America and probably all are more common there.

Fruits black when mature; inflorescence originating from the primary stem or from a very short usually leafless secondary stem; pyrenes not ridged..... *G. macropoda*.

Fruits red or orange when mature; inflorescence usually from an elongated leaf-bearing secondary stem; pyrenes prominently ridged.

Ovary, fruits and leaves pubescent..... *G. cordifolia*.

Ovary and fruit glabrous, leaves usually so.

Leaves acute or acuminate, obviously longer than broad..... *G. gracilis*.

Leaves obtuse, about as long as broad..... *G. repens*.

*GEOPHILA CORDIFOLIA* Miq. Stirp. Surin. Sel. 176. 1850; Steyerl. Mem. N. Y. Bot. Gard. 23: 392. 1972. *Mapouria trichogyne* Muell.-Arg. in Martius, Fl. Bras. 6: 423. 1881. *Geophila trichogyne* Standl. Field Mus. Bot. 7: 423. 1931.

The species occurs in British Honduras, Guatemala and Costa Rica. The abundant pubescence distinguishes it superficially from others in Central America and Panama. Widely distributed in lowland South America,-- the Guianas, Venezuela, Colombia and Peru (var. *peruviana* Steyerl.).

*GEOPHILA GRACILIS* (Ruiz & Pavón) DC. Prodr. 4: 537. 1830. *Psychotria gracilis* Ruiz & Pavón, Fl. Peruv. 2: 63, t. 211, fig. C. 1799.

Known from a single specimen in Nicaragua (*van der Sluijs* S666) and in Panama from Barro Colorado Island (*Croat* 10989; *Ebinger* 569; *Seibert* 564; *Starry* 31). In South America known

from Surinam, Venezuela, Peru where abundant, Bolivia and Brazil.

*GEOPHILA MACROPODA* (Ruiz & Pavón) DC. Prodr. 4: 537. 1830; Steyererm. Mem. N. Y. Bot. Gard. 23: 390. 1972. *Psychotria macropoda* Ruiz & Pavón, Fl. Peruv. 2: 63, t. 211, fig. B. 1799.

A widely distributed species and one reaching from Mexico, British Honduras, Guatemala, Honduras, Costa Rica and Panama to southern South America, Paraguay and Argentina. The species usually has been confused with *G. repens*. It is apparently the only black-fruited species in the genus.

Dr. F. R. Fosberg called my attention to the Central American specimens of this plant a year or so ago, pointing out its distinguishing characters. Dr. Steyermark's publication indicates that he came to the same conclusions.

*GEOPHILA REPENS* (L.) I. M. Johnston, Sargentia 8: 281. 1949. *Rondeletia repens* L. Syst. 928. 1759. *Psychotria herbacea* Jacq. Enum. Pl. Carib. 16. 1760. *Geophila herbacea* Schum. in Engler & Prantl, Pflanzenf. IV. 4: 119. 1891. *Geocardia herbacea* Standl. Contr. U. S. Nat. Herb. 17: 445. 1914.

The best known and the commonest of the *Geophilas*, distributed from Mexico and Central America, Panama, and the West Indies south to Argentina.