

ELATINE IN HAITI

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The writer stated in the previous number of this journal (Vol. 5, No. 5, p. 185) that Holdridge 1875 from Haiti, distributed as Bergia sessiliflora Grisebach, is an Elatine, probably a new taxon. It since has been possible to evaluate the species and compare it not only with the American material of the genus but also, in a more cursory way, with the descriptions and available specimens of the Old World representatives. Notwithstanding its striking appearance because of great size, our plant has flower and seed characters which place it undoubtedly with the amphigean E. triandra Schkuhr, and following Fassett's interpretation (Rhodora 41:367-376. 1939), it is judged as worthy of only infraspecific distinction. A new variety is here proposed for the Haitian plant. However, it was not easy to decide on the varietal rather than formal or phaseal category, for it is known how potent is the effect of habitat on E. triandra. Even the seed morphology may be affected by the isolation of colonies in different ponds or other hydrophytic sites strewn intermittently throughout the world. The present record is the first for Elatine in the West Indies. The only other member of the Elatinaceae reported for the Caribbean area is Bergia capensis L.

ELATINE TRIANDRA Schkuhr var. HAITIENSIS Monachino, var. nov.

Planta aquatica robusta, foliis elliptico-lanceolatis, 11-16 mm. longis, 4-5 mm. latis; seminibus 0.6-0.7 mm. longis, 0.27 mm. diametro, cum 10 lineis separatim ex alveolis 18-19 formatis.

An exceptionally robust and luxuriant aquatic variety, with the aspect of a large Callitriche; stem long, about 5-6 mm. thick, rooting, the internodes up to 25 mm. long; leaves elliptic-lanceolate, up to 16 mm. long, 5 mm. broad, minutely retuse at apex, narrowed at base, remotely punctiform-crenulate, teeth 4 or 5 on each margin; flowers almost sessile, 3-merous (stigmas sometimes 2 apparently), the sepals about 0.7 mm. long, 0.4 mm. broad, the petals rounded at apex, about 1 mm. long, 0.6 mm. broad; capsules almost sessile, globose, depressed at apex, surpassing the corolla; seeds slightly curved or straight, about 0.6-0.57 mm. long, 0.27 mm. thick, the pits on seed-coat arranged in 10 rows, about 18 or 19 in each row, elongated hexagonal and with interlinking angled ends, those toward the ends of the seed becoming smaller and shorter.

Type: L. R. Holdridge 1875, Haiti, W. I., Mare Etabli, Mornes des Commissaires, in standing water; Dec. 14, 1943; deposited in the United States National Herbarium. Isotype in the Missouri Botanical Garden.

E. triandra has been reported from North and South America, Europe, Africa and Asia, and many varieties have already been proposed for the species. Fassett enumerated four varieties for North America and described another for the Andean South America. The typical variety of E. triandra and the var. obovata Fassett are the only reported for Mexico. The seeds of the latter, of all the North American material, nearest approach in appearance those of E. triandra var. haitiensis. Seubert (Elatinorum Monographia, 1845) cited a Bertero collection from Chile under E. triandra. Molfino (Anal. Mus. Nac. Buenos Aires 34:101. 1926-1928) stated that the species was found in the province of Mendoza, Argentina, surely introduced from Chile in 1919. Seubert proposed E. triandra var. micropoda (with pedicellate flowers) from Senegambia, Africa; J. Trochain described var. robusta from the same area; Makino listed his var. orientalis for Japan.

Fassett also recognized four formae of E. triandra in North America; f. submersa Seubert (said to be probably introduced in Skowhegan, Maine, but surely native in Wisconsin) is the one with the largest leaves. Other robust forms are the European E. triandra f. callitrichoides Ruprecht, described as a particularly large aquatic form, and f. stenophylla Seubert, described and illustrated by the author in his monograph. E. oryzetorum Komarov (Bull. Jard. Bot. Acad. Sc. URSS 30:206. 1932) was described as differing from the submersed form of E. triandra in its greater stature and broader leaves, stems 20-25 cm. long, leaves 11 mm. long, 2-3.3 mm. broad, seeds with apex more plane; it suggests nothing but a form or variety of E. triandra.

Fassett classified the North American species and varieties of Elatine. Six or seven species have been described for South America. The two for Brazil are E. Lindbergii Rohrbach, with ovate to ovate-lanceolate leaves often cordate at base, and E. Glaziovii Niedenzu, with sepals as long as the petals. E. Fassettiana Steyermark, from Mérida, Venezuela, and E. peruviana Baehni & Macbride have pedicellate flowers. E. nivalis Spegazzini (estipulate, according to the author), from Mendoza, Argentina, and E. chilensis Gay are tiny in size. According to Macbride, Flora of Peru, "E. microphylla Grisebach" (that is, Lechler 2687 from Puno, Peru) is probably E. triandra var. andina Fassett. The South American species have not been studied critically. To know what the relationship is between the American and the Old World taxa, for example such species as E. gratiolooides A. Cunningham and E. ambigua Wight, it is necessary for a monographer to revise the whole genus.