A SPECIES OF ANTIRHEA (RUBIACEAE) FROM SURINAME

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Antirhea surinamensis Brem. n. spec. ramulis novellis non resinosis, inflorescentiis multifloris, bis ramificatis, floribus 4-meris, ovariis paucilocularibus ad A. obtusifoliam Urb., A. coriaceam (Vahl) Urb., A. Shaferi Urb., A. occidentalem Urb., A. tenuifoliam Urb., A. panamensem Standl. accedens, sed a speciebus his omnibus ovario et capsula 3-loculari, pedunculis longioribus distinguenda, a speciebus his A. panamensi solum excepta insuper foliis acutissime exeuntibus, ab A. obtusifolia insuper foliis basi acutis, ab A. coriacea inflorescentiae ramulis brevioribus, ab A. occidentali et A. panamensi corolla extus pilosula diversa.

Habitus nondum accurate notus, sed certe arborescens. Rami novelli glabri vel interdum sparse sed longius pilosi, non resinosi, mox cortice griseo-brunneo opaco, plicatulo et sparse lenticellato vestiti, circ. 1.5 mm diam., ex internodiis paucis compositi, internodio infimo 4.5-8.0 cm longo, internodio secundo interdum usque ad 3 cm longo sed plerumque 1 cm haud superante, aliis 0.2-0.6 cm longis. Folia petiolata; petiolus canaliculatus appresse pilosus sed ad marginem hirtellus, 3-6 mm longus; lamina elliptica vel obovata, 4.5-10 cm longa et 2.0-4.7 cm lata, apice acuminata et acutissime exeuns, basi acuta, subcoriacea, utrimque opaca, siccitate non conspicue discolorata, supra glabra, subtus costa nervisque densius, inter nervos sparse pubescens, costa supra impressa, subtus prominente, nervis utroque latere costae plerumque 7 prominulis, reticulatione densa siccitate colore saturatiore distinguenda sed haud prominula. Stipulae ovato-triangulares, 5 mm longae, extus glabrae, margine tamen ciliolatae, mox deciduae. Inflorescentia pedunculo appresse piloso 4.5-7 cm longo instructa; bis pseudo-dichotome ramificata, ramulis primariis 4-5 mm longis, ramulis secundariis 10-15 mm longis, floribus usque ad 12 instructis. Bracteae ovato-acuminatae 0.5 mm longae. Flores sessiles, ebracteolati, 4-meri. Ovarium parce appresse pilosulum, 3loculare. Calyx etiam parce appresse pilosulus tubo 0.2 mm, lobis ovato-triangularibus 0.3 mm longis. Corolla extus appresse pilosula, tubo 7-8 mm longo et 0.8 mm diam., intus glabro, lobis ellipticoorbicularibus 1.4 mm longis et 1.0 mm latis. Stamina filamento brevissimo instructa; antherae dorsifixae fere 0.5 mm infra orem tubi inclusae, lineares, 2.6 mm longae. Granula pollinis 3-pora, distincte reticulata, 25 µ diam. Discus cylindricus 0.4 mm altus. Stylus glaber, tubo acquilongus; stigma capitatum. Drupa glabra, 9 mm alta et 4.5 mm diam., pyrena 3-lobata et 3-loculari.

Habitat Guyanam Batavorum.

Suriname: region of the Maratakka River, Helstone 237 U, type, 6.6.1958.

This species shows no near affinity with A. guianensis Brem. (Kew Bull. 1952: 260) from British Guiana, the only other representative of this genus that is known so far from the South American continent, but it comes perhaps nearest to A. panamensis Standl., from which it differs in the slightly shorter petioles, the somewhat wider and larger leafblade, the longer peduncle, the outside pilosulous corolla and the 3-celled ovary. A. panamensis belongs, like the other species mentioned in the diagnosis to a group with non-resinous branches, many-flowered inflorescences and ovaries with two or three cells, whereas A. guianensis forms part of a group of species with resinous branches, few-flowered inflorescences and ovaries with at least four cells. The differences between these two groups are probably even more pronounced, for in the species of the first group of which flowers were available to me. the style proved to be as long as the corolla tube and to end in a capitate stigma, whereas in the species of the other group, it is less than half as long as the tube, and it goes out into linear stigmata. This means that the flowers of the second group are provided with the same pollination mechanism that I described for Kohautia DC, the subgenus Eusipanea K. Sch. of Sipanea Aubl., Cladoceras Brem. and Posoqueria Aubl., but which occurs also in species of the nearly related genera Guettarda L and Laugeria Vahl (see my work on "the African species of Oldenlandia L sensu Hiern et K. Schumann" in Verh. Kon. Ned. Akad. v. Wetensch., Afd. Natuurk. 2nd Ser., Vol. 48, No. 4, 1952, p. 27 and 28). There seems also to be a difference in pollen structure, for although they are everywhere globose and 3-porous, they are in the two species of the first group which I could study, viz. A. surinamensis and A. lucida (DC) Bth. et Hook. f., very distinctly reticulate, whereas in the two species of the second group from which they are known to me, viz. A. guianensis and A. acutata (DC) Urb. they are either smooth or minutely punctate. These features should, of course, be studied in a far larger number of species, but it is not improbable that such a study will lead to a splitting of the genus. However, before such a step can be taken, the Old-World species should be studied too. Of the latter no good material was available to me, and the only thing I can say at the moment is that the species from the Malay Archipelago differ from the American ones in the peculiar design of the leaves, which is the same as that seen e.g. in the genera Sommera Schlecht. and Pentagonia Bth., and which is usually referred to as moiré or watered striation.

The branches of A. surinamensis show the sympodial structure which I have described years ago from Terminalia, Elaeocarpus and some Sapotaceae (De Tropische Natuur 25: 9. 1936). They start with a long internode, which is followed by some rather short ones; then further elongation stops. Growth is resumed by one or two axillary branches arising from the axil of one or two of the leaves belonging to the short internodes. Sympodial branches of this type are also met with in A. *lucida* and in A. *obtusifolia*, but it is certainly no general feature of the genus, not even of the first group.