

FLORA DA RESERVA DUCKE, AMAZONAS, BRASIL: ZINGIBERACEAE

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Zingiberaceae Lindl., Key Bot.: 69. 1835. *Nom. cons.*

Maas, P. J. M. 1977. *Renalmia* (Zingiberaceae-Zingiberoideae). Fl. Neotrop. Monograph 18: 1-161.

Large perennial, strongly aromatic **herbs** with rhizomes. **Leaves** distichous, with a ligule and an open sheath. **Inflorescence** a bracteate panicle, terminal on a separate, basal, leafless shoot. **Flowers** zygomorphic. Sepals 3, connate into a tube, persistent. Petals 3, basally connate. Fertile stamen 1. Staminode (the so-called lip or labellum) petal-like. Ovary inferior, 3-locular, placentation axile, ovules many. **Fruit** a capsule. **Seeds** many, completely covered by an orange aril.

The family is represented in the Neotropics by one genus, *Renalmia*, with c. 50 species (the majority of the genera is found in the Asian tropics). Found throughout the Neotropics but with a distinct centre in Costa Rica and Panama, and in the foothills of the Andes. In the Reserva Ducke only one species, *Renalmia floribunda*, is found.

Renalmia floribunda K. Schum., in Engler, Pflanzenreich Heft 20: 300. 1904; Maas, Fl. Neotrop. 18: 74. fig. 27. 1977.

Herbs, 0.5-3 m tall. Sheaths reticulate, brown to green (chocolate-brown in herbarium material). Ligule 1-2 mm long. Petiole 0-15 mm long. **Lamina** narrowly elliptic, 30-75 cm long, 4-10 cm wide, subglabrous, base acute, apex acuminate (acumen 5-15 mm long). **Inflorescence** a basal thyrse, prostrate in fruit, sterile part 10-60 cm long, beset with sheaths up to 2-6 cm long and 0.5-1 cm wide. **Flower** bearing part 10-50 cm long, 4-9 cm wide, with 2-6-flowered cymes, rachis green, most parts densely to sparsely covered with minute hairs. Bracts pale green, membranous,

caducous, narrowly triangular-ovate, 10-40 mm long. Bracteoles pale green, 10-20 mm long. Pedicels green, 10-35 mm long. Calyx green, turbinate, 3-6 mm long, lobes 1-2 mm long. Corolla pale yellow, c. 12 mm long, tube 4-5 mm long, lobes 7-8 mm long. Labellum yellow, 10-11 mm long, limb horizontally spreading, 7-8 x 8-11 mm. Anther purplish red, 3-5 mm long. Style 9-10 mm long. **Capsule** green, maturing black, globose to ellipsoid, 4-11 mm in diam., 10-25-seeded, crowned by the orange, persistent calyx. **Seeds** shiny brown, aril orange, fringed.

Northern South America, including Trinidad and the Amazon River region.

In non-inundated forest, on sandy to clayey soil.

Flowering and fruiting from December to May.

8.XII.1994 (fl, fr) *Costa, M. A. S. et al. 36* (INPA U); 5.V.1994 (fr) *Ribeiro, J. E. L. S. et al. 1312* (INPA K MG U); 11.III.1968 (fr) *Rodrigues, W. & Monteiro, O. P. 8467* (INPA); 1.I.1972 (fr) *Silva, M. F. da 32* (INPA); 24.III.1994 (fl fr) *Vicentini, A. et al. 441* (INPA).

Renalmia floribunda is distinguished by its distichous, ligulate, strongly aromatic leaves, and open leaf sheaths. The inflorescence is often prostrate, lying on the forest floor, the flowers and fruits often completely covered by leaf litter.

The collection *Costa & Silva 507A* (INPA) has been identified as *Zingiber zerumbet* (L.) Sm. This collection is made near the Alojamento, and presumably represents a cultivated plant, as the genus *Zingiber* is not wild in America, but originates from Asia.

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