

FLORA DA RESERVA DUCKE, AMAZONAS, BRASIL: HELICONIACEAE

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Heliconiaceae Nakai, J. Jap. Bot. 17: 201. 1941.

Andersson, L. 1985. Revision of *Heliconia* subgen. *Stenochlamys* (Musaceae-Heliconioideae). Opera Bot. 82: 1-123.

Maas, P. J. M. 1985. Musaceae. In A. R. A. Görts-van Rijn (ed.), Fl. Guianas 1: 1-28.

Large rhizomatous **herbs** with rhizomes. **Leaves** distichous, mostly distinctly petiolate, with an open sheath. **Inflorescence** a terminal, erect or pendent thyrses. Bracts distichous or spirally arranged, often brightly colored, large, boat-shaped, coriaceous, persistent, each enclosing a several-flowered cyme. **Flowers** tubular. Tepals 6, one of them often reflexed. Stamens 5. Staminode 1, very small. Ovary inferior, 3-locular, placentation axile, ovule 1 per locule. Style 1, stigma 1. **Fruit** berry-like, 3-seeded, often bluish when ripe. **Seeds** stony, greyish.

One genus, *Heliconia*, with over 150 species occurring throughout the Neotropics, with a main centre of distribution in Costa Rica and Panama, and in the foothills of the Andes. In the Reserva Ducke two species of *Heliconia* are found.

This family can be distinguished from two other families of the large Monocots (Costaceae and Zingiberaceae) by the absence of a ligule, and from Marantaceae by their distinctive inflorescence composed of brightly colored, boat-shaped bracts. The genus *Heliconia* is much visited and pollinated by hummingbirds.

Key to the species of *Heliconia* of Reserva Ducke

1. Flowers white; bracts red (sometimes yellow); lower side of leaves with a slightly hairy midrib 1. *H. acuminata* subsp. *occidentalis*
1. Flowers orange; bracts green, surface waxy; lower side of leaves glabrous 2. *H. psittacorum*

1. *Heliconia acuminata* Rich. subsp. *occidentalis* L. Andersson, Opera Bot. 82: 61. fig. 38F-H. 1985.

Herbs, 0.5-1.5 m tall. Petiole 5-20 cm long. **Leaves** narrowly oblong-elliptic, 25-55 cm long, 5-10 cm wide, base acute, apex acuminate, midrib sparsely covered with brownish hairs below. **Inflorescence** erect, 10-15 cm long. Peduncle 15-25 cm long. Bracts red, 4-5, distichous, horizontally patent, widely spaced, narrowly boat-shaped, basal bract 15-20 cm long, 0.5-1 cm high. Pedicels 1-2 cm long. **Flowers** white with green sub-apical spot, 4.5-5.5 cm long. Staminode 7-16 mm long. **Fruit** subglobose, blue, c. 5 mm in diam.

Upper Rio Orinoco and Rio Negro region, and central and southern Amazon Basin.

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

Flowering and fruiting from April to January.

Local names: Banana-brava, Bananinha-amarela.

3.I.1995 (fl) Costa, M. A. S. et al. 63 (GB INPA U); 28.XII.1995 (fl) Costa, M. A. S. & Silva, C. F. da 587 (INPA); 1.VII.1997 (fl) Hopkins, M. J. G. et al. 1638 (INPA K U); 7.VIII.1995 (fl) Nee, M. 46196 (INPA U); 2.V.1988 (fr) Nelson, B. W. et al. 1602 (INPA U); 12.XII.1968 (fl) Prance, G. T. et al. 9039 (INPA U); 1.IX.1966 (fr) Prance, G. T. et al. 2163 (INPA); 21.VII.1976 (fl) Projeto Flora INPA57107 (INPA); 10.IX.1987 (fl) Pruski, J. F. et al. 3207 (INPA U); 6.VII.1993 (bd) Ribeiro, J. E. L. S. et al. 897 (INPA); 23.X.1961 (fl, fr) Rodrigues, W. & Lima, J. 2700 (INPA); 7.IV.1988 (fl) Santos, J. L. & Lima, R. P. de 882 (GB INPA K MG NY RB SP U).

Heliconia acuminata subsp. *occidentalis* is recognized by its red bracts and white flowers. In this species there is a sparse indument on the midrib of the lower leaf side. Most floral parts are glabrous, but exceptionally some brown hairs are found on bracts and pedicels.

The collection *Rodrigues & Lima 2700* has been identified by two *Heliconia* specialists as belonging to this subspecies. It is aberrant, however, in its larger leaves (to 65×15 cm), yellow bracts and flowers, many-flowered bracts (with up to 25 flowers versus up to 10-flowered in typical material) and by a denser indument on various flower parts.

2. *Heliconia psittacorum* L.f., Suppl. Pl. 158. 1781; Maas, P. J. M. in A. R. A. Görts-van Rijn (ed.), Fl. Guianas 1: 17. 1985

Herbs, 1-1.5 m tall. Petiole 0-10 cm long. **Leaves** narrowly oblong-elliptic to linear, 30-60 cm long, 4-6 cm wide, glabrous, base obtuse to acute, apex narrowly acute and

acuminate. **Inflorescence** erect, 5-15 cm long. Peduncle 10-25 cm long. Bracts 4-5, green, surface waxy, distichous, ascending, moderately spaced, narrowly boat-shaped, basal bract 10-15 cm long, *c.* 0.5 cm high. Pedicels green, 1-2 cm long. **Flowers** orange, with a greenish spot near the apex, 4-5 cm long, white-tipped, one of the tepals reflexed, glabrous. Staminode 10-12 mm long. **Fruit** subglobose.

Lesser Antilles and tropical South America.

In non-inundated forest, on clayey soil.

Flowering and fruiting from October to December.

1.XII.1994 (fl) *Assunção, P. A. C. L. 109* (INPA); 1.XII.1994 (fl) *Costa, M. A. S. 109* (INPA); 22.XII.1995 (fl) *Costa, M. A. S. & Assunção, P. A. C. L. 588* (INPA); 29.XI.1976 (fl) *Mendonça, S. & Shima, D. 25* (INPA); 14.XII.1995 (fr) *Nascimento, J. R. 691 or 1691* (INPA); 10.X.1995 (fl) *Ribeiro, J. E. L. S. et al. 1722* (INPA). 6.X.1995 (fl) *Ribeiro, J. E. L. S. et al. 1721* (INPA).

Heliconia psittacorum can be recognized by waxy, green bracts and orange flowers.

