Annona longipedicellata, a new species of Annonaceae from the Brazilian Amazon region

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Abstract
A new species of Annonaceae, Annona longipedicellata, from the Brazilian Amazon is described and illustrated. It differs from A. hypoglauca and A. scandens, its closest two species, by much longer pedicels, densely covered red-brown hairs on leaves and flowers and additionally from A. hypoglauca by its habit as liana.

Key words: Annona longipedicellata sp. nov., Amazonia.

The new Annona species was collected during an official trip to the Campo Petrolífero of Petrobras in Urucu, Coari, Amazonas state, at about 4°53'31"S, 65°20'57"W. It occurred as a liana in pristine terra firme lowland forest and was recognized as an undescribed taxon.


Frutex scandens. Foliorum petioles 5–10 mm longus; lamina discolor, supra glabra et nervis pilis minutis cinnamomea-fusci adpressis, subtus cinnamomea-fusci et pilis minutis vestita, elliptica, ovata vel oblonga, basi rotundata, apicem plus minus abrupta acuminata, 10–12.5 cm longa et 5.5–6.5 cm lata. Flores in inflorescentiis paucifloris (2–4), vel solitaris, pedicelli 5–6 cm longi, sub medium bracteis deltoideis 1–2 mm longi instructi. Sepala triangularia, connata, extus ferrugineo-pubescentia, 2–3 mm longa. Petala 3, crassa, ovata vel rotundata, extus ferrugineo-tomentella, c. 20 mm longa et c. 15 mm lata. Fructus ignotus.

Liana. Petioles of leaves 5–10 mm long; the two faces of the leaf blade unlike in color, upper side glabrous with only nerves covered with small brownish hairs, lower side of blade totally covered with small ferruginous hairs, more or less elliptical, ovate or oblong, leaf basis rounded, apex more or less acuminate, 10–12.5 cm long and 5.5–6.5 cm broad. Flowers in few-flowered inflorescences (2–4), or solitary, pedicels 5–6 cm long, with 1–2 mm long deltoid bracts. Sepals triangular and fused with each other, externally with ferruginous hairs, 2–3 mm long. The three thick petals ovate or rounded, upper side covered with ferruginous hairs, c. 20 mm long and c. 15 mm broad. Fruit unknown.

The new species was found to grow as a liana in terra firme forest, at the surroundings
Figure 1 – Voucher specimen of isotype (ULM) of *Annona longipedicellata*, *sp. nov*. Note ferruginous hairy flowers and underside of leaves.
Figure 2 – a. General view of *Annona longipedicellata* with leaves and inflorescences. b. Inflorescence with three flowers, two with dropped petals, one in bud. Note connate sepals. c. Longitudinal section of flower bud showing the three thick petals and the cone of reproductive organs.
of the Urucu Petrobras petrol camp in lowland Amazonia. The twigs, petioles, undersides of leaves, peduncles, pedicels, as well as sepals and petals are densely covered by short, ferruginous hairs. Because the pedicels are remarkable long, up to 6 cm, the species is named *A. longipedicellata*. The three sepals are completely connate and form a nearly round plate.

*Annona longipedicellata* apparently is closest to *A. hypoglauca* and *A. scandens* (Fries 1931; Rainer 2007). However, *A. hypoglauca* is a shrub or a tree of 10 m height, growing in inundated forests, while *A. longipedicellata* is a liana growing in terra firme forest. The underside of leaves of *A. hypoglauca* and *A. scandens* is whitish-bluish colored and has a sparse cover of whitish hairs. Their pedicels are short in comparison with *A. longipedicellata*, being only 1.2–1.8 cm long. *A. longipedicellata* has ferruginous hairs covering twigs, petioles, underside of leaves, peduncles, pedicels, sepals and petals. Most remarkable are the length of pedicels of the new species, which can reach 6 cm, and which are far longer than in the two other species.

When considering the classification of Fries (1931, 1959), the new species belongs to the species-richest section, *Pilannona* Saff., for which, at the time, Fries (1931) recognized 21 and later 24 species (Fries 1959). *Pilannona* was characterized by Fries (1931, 1959) by reduced inner petals, connectives of stamens scutiform and flowers in bud roundish. In a preliminary revision of *Annona*, Rainer (1997) put the 17 sections of Fries (1959) into five groups. In the first group, to which also the section *Pilannona* belongs, species originally have six large and fleshy petals, a large pollination chamber, large stamens and a “primitive” venation pattern of the leaves. In a further evolutionary line of this group, there is a transition from triangular outer petals and reduced inner petals (sect. *Helogenia* Saff.) to broadly ovoid outer petals (= almost globose flower buds), and absent inner petals (sect. *Pilannona*). *Pilannona* is the section to which the new species, *A. longipedicellata* and its relatives, *A. hypoglauca* and *A. scandens* belong. *Annona hypoglauca* is a common species in inundated forests along the rivers of the Amazon region, while *A. longipedicellata*, seems to be a rare species, known until now only from the locus classicus, in terra firme phytophysiognomy. Even in intensively studied places in Amazonia, such as in the botanically well explored Reserva Ducke close to the city of Manaus (Ribeiro *et al.* 1999; Maas *et al.* 2007), it didn’t show up.

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**References**


