THE MACHRIS BRAZILIAN EXPEDITION

BOTANY: Phanerogamae, Bromeliaceae and other smaller families

By Lyman B. Smith

The plant collections reported upon below were obtained by E. Yale Dawson, Expedition botanist, and are cited by his field collection numbers. Detailed locality data for these may be found in his general account of the botany of the Expedition. Briefly, however, specimens bearing numbers from 14133 to 14815 came from the Chapada dos Veadeiros, between São João da Aliança and Veadeiros, April 13—May 3, 1956. Those bearing numbers from 14816 to 15236 came from the region between Amaro Leite and Peixe, especially in the southern Serra Dourada, May 15—June 10, 1956.

The first set of specimens is deposited in the Los Angeles County Museum, except holotypes of the two new species which are in the Museu Nacional do Brasil in Rio de Janeiro.

Inasmuch as the author is a specialist in only one of the families treated, namely the Bromeliaceae, references are given to the works used in making determinations in the others.

BROMELIACEAE

Bromelia karatas L. 14994
Bromelia villosa Mez 15109

Fig. 1.

Heretofore this highly ornamental species has been known by fragmentary dried material alone. It is hoped that the accompanying figure will arouse interest in its cultivation. The type of this species was collected by Glaziou between “Sitio de Bacarão” and “Areias,” neither

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locality being identifiable, but in all probability situated in southern Goiás in the same region as that covered by the Machris Expedition.

Dyckia dawsonii L. B. Smith, sp. nov.

A D. niederleinii Mez, cui affinis, laminis foliorum angustissimis quam longitudine spinarum angustioribus, petalis minoribus ecarinatis differt.

Fruiting plant about 7 dm high; leaves to 22 cm long, the sheaths suborbicular, over 2 cm in diameter, glabrous, stramineous, lustrous, the blades linear, 7 mm wide at base, covered on both sides with cinereous appressed scales, laxly serrate with slender curved mostly subopposite spines 5-7 mm long; scape 4 mm in diameter, glabrous; scape-bracts broadly ovate with a linear blade, thin, entire, all but the lowest much shorter than the internodes; inflorescence simple, lax, 25-30 cm long, glabrous; floral bracts suborbicular, apiculate, 4 mm
long, thin, erose; pedicels stoutly obconic, 3 mm long; sepal reaction broadly oblong, obtuse, 5-6 mm long, thin, ecarinate; petals 9 mm long, ecarinate, the blade broadly obovate, yellow; stamens exserted, the filaments connate for 2 mm above the 1 mm tube with the petals; stigmas subsessile.

Fig. 2. Dyckia dawsonii sp. nov. Herbarium material prepared from a plant collected at the type locality by A. L. Carvalho and flowered in Rio de Janeiro in November 1956.
Fig. 3. *Dyckia dawsonii* sp. nov. A group of plants growing at the type locality in the Serra Dourada, Goiás, June 1, 1956. Photo by A. L. Carvalho.
Fig. 4. Dyckia dawsonii sp. nov. A plant from the type collection cultivated in Santa Monica, California.

Type: Museu Nacional do Brasil, Rio de Janeiro, collected on rocks in an outcrop along a cerrado canyon 20 km east of Formoso, region of the southern Serra Dourada at W. Long. 48° 50', S. Lat. 13° 45', Goiás, Brazil, June 10, 1956, by E. Yale Dawson (No. 15236). Isotypes in the United States National Herbarium and in the Los Angeles County Museum. The original collection was in very old fruit, but was cultivated by A. L. Carvalho and flowered in Rio de Janeiro in November 1956. The description is drawn from both collections.
The technical floral characters of *Dyckia dawsonii* place it next to *D. niederleinii*, to which it bears little resemblance otherwise. Its leaves alone distinguish *Dyckia dawsonii* from all other species in the genus, but are strikingly similar to those of *Encholirium bradeanum* L. B.

Fig. 5. *Dyckia machrisiana* sp. nov. The type specimen.
Smith. The latter, however, has a relatively long cylindrical pedicel which quickly distinguishes it from *Dyckia dawsonii* even in fruit.

**Dyckia machrisiana** L. B. Smith, sp. nov.  

A *D. tuberosa* (Vell.) Mez, cui affinis, laminis foliorum utrinque albido-lepidotis, laminis petalorum atris differt.

Flowering plant 8 dm high; leaves rosulate, 25 cm long, the sheaths suborbicular, 3 cm in diameter, glabrous, the blades linear-triangular, 15 mm wide, covered on both sides with white subappressed scales, laxly serrulate with acicular teeth 1 mm long; scape 4 mm in diameter, sparsely pale-lepidote; scape-bracts broadly ovate, thin, abruptly contracted into a linear-triangular apex, all but the lowest several times shorter than the internodes; inflorescence simple, lax, sparsely pale-lepidote; rhachis slender, flexuous; floral bracts broadly ovate, acuminate, to 6 mm long; flowers spreading or divergent; pedicels cylindric, stout, 2-4 mm long; sepals ovate, obtuse, 7 mm long, ecarinate, rather fleshy; petals 10 mm long, the blades elliptic, ecarinate, dark blackish orange externally (! Dawson); stamens included, the filaments free above the short common tube with the petals; stigmas subsessile.


* Dyckia minarum Mez 14153; 14803  
* Dyckia racemosa Baker 14494

This collection from the vicinity of São João da Aliança is the first since the type which was made by Gardner at Arraias in April 1840. The two localities are not far apart.

**Tillandsia streptocarpa** Baker 14587

**ALISMACEÆ**

*Echinodorus paniculatus* Micheli 15168  
*Sagittaria rhombifolia* Cham. 15164


**ARALIACEÆ**

*Dendropanax cuneatum* (DC.) Dene. & Planch. 14890  
*Didymopanax macrocarpum* Seem. 14267

References: E. Marchal, Fl. Brasiliensis 11, pt. 1: 229-258. 1878

BORAGINACEÆ

Cordia callocephala Cham. 14749
Cordia superba Cham. 14996
Heliotropium indicum L. 14905
Heliotropium salicoides Cham. 14196

BURMANNIACEÆ

Burmannia capitata (Walt.) Mart. 14632
Burmannia flavá Mart. 14886a

COMBRETACEÆ

Combretum fruticosum (Loefl.) Stuntz 15191

LOGANIACEÆ

Spigelia scabra Cham. & Schlecht. 15125

PRIMULACEÆ

Anagallis pumila Sw. 14793; 14885

STYRACACEÆ

Styrax ferrugineus Nees & Mart. var. grandifolius Perk. 15076; 15234.

TILIACEÆ

Luehea speciosa Willd. 15046
Triumphetta abutiloides St.-Hil. 14376; 14732
Triumphetta althaeoides Lam. 15129