# THE LOGANIACEAE OF AFRICA XIII. BUDDLEJA L. I.

## A. J. M. LEEUWENBERG

Laboratorium voor Plantensystematiek en -geografie, Wageningen

# Introduction

The genus Buddleja is represented in Africa by several indigenous and some cultivated and/or naturalized species. In order to come to a new sectional arrangement and to be certain about the nomenclature of the species represented in Africa the present author has all species of this genus under study.

In anticipation of the forthcoming revision a new name and a new species are published here.

### A NEW NAME REPLACING A HOMONYM

# Buddleja loricata Leeuwenberg, nom. nov.

Basionym: Nuxia corrugata Benth. in Hooker, Comp. Bot. Mag. 2: 60. 1836. Type: S. Africa: Cape Province: Aliwal, N. of Herschel, Witbergen, Drège 3618 (K, holotype; isotypes: P, PRE of which the last not seen).

Homotypic synonyms: Chilianthus corrugatus (Benth.) A. D.C. in De Candolle, Prod. 10: 436. 1846; Solereder in Engler & Prantl, Nat. Pflanzenf. 4 (2): 46. 1892; Sim, For. Fl. Cape Col. 276. 1907; Prain & Cummins in Fl. Cap. 4(1); 1044. 1909. Buddleja corrugata (Benth.) Phillips, Journ. S. Afr. Bot. 12: 114. 1946; Verdoorn in Fl. S. Afr. 26: 166, f. 23. 2. 1963; Palmer & Pitman, Trees S. Afr. 3: 1887. 1973; not Jones, Contrib. West Bot. 18: 56. 1933.

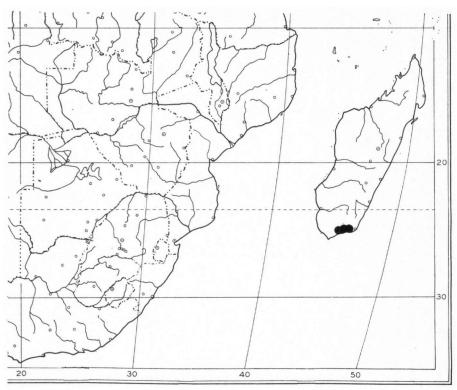
The upper side of the leaves resembles the skin of a crocodile. More will be published about this species in the forthcoming revision.

### A NEW SPECIES FOR AFRICA

## Buddleja fragifera Leeuwenberg, sp. nov.

Fig. 1; Map 1 Frutex multo ramificatus ramulis foliis inflorescentiisque pilis stellularibus tomentosis. Folia longius petiolata. Lamina late ovata, ovata vel elliptica apice rotundata basi subcordata usque ad cuneata margine sinuata vel integra. Inflorescentia terminalis capituliformis globosa. Flores sessiles tetrameri. Corolla tubo cylindrico calycem circiter duplo superante lobis patentibus. Antherae sessiles fauce corollae insertae. Ovarium subglobosum pilis stellularibus hirtopubescens. Fructus baccantes ovoidei apice mucronati in capitulis Fragariae vel Rubi infructescentiis similibus dispositi. Semen oblique ellipsoideum.

84 A. J. M. LEEUWENBERG



Map 1. Buddleja fragifera Leeuwenberg

Typus: Madagascar: Andrahomana, SW. of Fort Dauphin (fl. Feb.) Humbert & Capuron 29124 (P, holotype; isotype: WAG).

Shrub 2-3 m high. Branches pale to dark grey-brown, with finely and longitudinally fissured bark; branchlets stellate-pubescent, rusty when dry. Leaves opposite, those of a pair equal, rather long-petiolate; petiole  $0.3-0.5 \times$  as long as the blade, stellate-tomentose, 4-10 mm long; blade broadly ovate, ovate or elliptic,  $1.2-1.5(-2.5) \times$  as long as wide,  $8-30 \times 5-24$  mm, obtuse or rounded at the apex, subcordate to cuneate at the base, sinuate or entire, with a thick felt-like indumentum of stellate hairs underlain by glandular trichomes, somewhat glabrescent above; 3-4 pairs of secondary veins, only above more or less conspicuous; tertiary venation inconspicuous on both sides. Inflorescence a globose head, terminal, 8-15 mm in diam., sometimes subtended by 2 leafy bracts which are much narrower than the leaves. Flowers 4-merous, sessile. Calyx often subtended by 1-2 much shorter sepal-like bracteoles, campanulate or nearly so, 2-2.5 mm long, outside stellate-tomentose, inside glabrous, without colleters; tube slightly longer than the lobes; lobes subequal, often broadly triangular,  $0.8-1.2 \times 1-1.2$  mm, obtuse or rounded at the apex, entire, erect.

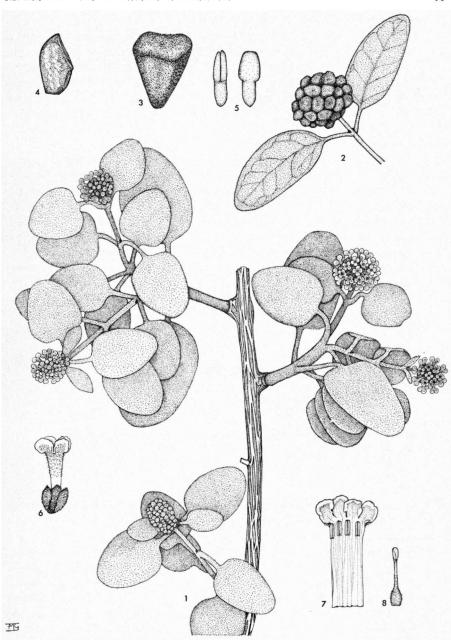


Fig. 1. Buddleja fragifera Leeuwenberg: 1. flowering branch,  $1 \times$ ; 2. infructescence,  $1 \times$ ; 3. fruit,  $4 \times$ ; 4. seed,  $10 \times$ ; 5. embryo,  $15 \times$ ; 6. flower,  $3 \times$ ; 7. opened corolla with stamens,  $4 \times$ ; 8. pistil,  $4 \times$  (1. Humbert & Capuron 29124; 2–5. Decary 2758; 6–8. Bosser 10299).

86 a. j. m. leeuwenberg

Corolla dark yellow to orange-red, with erect lobes  $2.4-3 \times as$  long as the calvx. 6-7.5 mm long, outside stellate-tomentose in upper half, glabrous at the base (also above the calyx) and at the apices of the lobes, inside pilose from near the level of the apex of the ovary to the insertion of the stamens; tube nearly cylindrical, 2–2.3  $\times$  as long as the calyx, 3–3.5  $\times$  as long as the lobes, 4.8–5.8 mm long, slightly widened towards the throat or not, at the throat 1 mm wide; lobes imbricate, broadly oblong,  $1.2-1.7 \times 1-1.3$  mm, rounded, obscurely crenate or entire, spreading. Stamens just included; anthers sessile with apices in corolla mouth, oblong,  $1-1.2 \times 0.3-0.4$  mm, retuse at the apex, deeply cordate at the base, glabrous, introrse; cells parallel, discrete, dehiscent throughout by a longitudinal slit. Pistil 4 mm long; ovary subglobose, laterally compressed, 1 ×  $0.9 \times 0.5$  mm, hirto-pubescent with stellate hairs, abruptly narrowed into the style, 2-celled; style 2.2 mm long, hirto-pubescent with stellate hairs at the base, glabrous at the apex; stigma narrowly obovoid, 0.8 mm long, obscurely bilobed. In each cell one axile placenta with 7 ovules attached to the septum. Infructescence subglobose, about 15 mm in diam. Berry obovoid, about 5-7 imes 3-5 imes3 mm, mucronate at the apex, pubescent with glandular and ordinary hairs; 6-14-seeded. Seed dark brown, obliquely ellipsoid to obliquely tetrahedral, 1.2- $1.6 \times 0.9 - 1 \times 0.8 - 0.9$  mm, often partially narrowly winged, minutely reticulate, shining. Embryo straight, white, 0.8-1 mm long; cotyledons suborbicular, 0.4-0.5 mm long, rootlet obtuse, 0.2-0.3 mm thick. Endosperm copious, mealy, white, surrounding the embryo.

Distribution: Only known from some localities in the extreme South of Madagascar.

Ecology: Bush, near the coast.

#### Paratypes:

Madagascar: South, Faux Cap (fl. Oct.) Bosser 10299 (P, WAG); between Ambovombe and Faux Cap (fl. Mar.) Bosser 14379 (P); Ambovombe (fl., fr. May) Decary 2725 (P, WAG), 2758 (P, WAG).

B. fragifera shows a remarkable resemblance to B. marrubiifolia Benth. from Texas and Mexico in its small, more or less ovate, felty leaves, globose inflorescences, and yellow to orange flowers. The two differ strikingly as follows:

### **ACKNOWLEDGEMENTS**

The author is greatly indebted to Miss F. M. Gillot for the fine drawing and to Prof. Dr. K. U. Kramer for correcting the text.