# REVISION OF THE SAPOTACEAE OF THE MALAYSIAN AREA IN A WIDER SENSE <br> XVI ${ }^{1}$ ). Aesandra Pierre 

## by

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For many years the monotypical genus Aesandra was incorporated in Payena (vide Lam 1925, 1927) or Madhuca (Bassia sensu Lecomte, 1930). Revising the genus Payena we came across specimens, that did not fit in the diagnosis of either genus; it appeared that the specimens in question showed a mixture of the characters of both Payena and Madhuca, and also some characters of their own. These we found to belong to what has been described as Aesandra. The only species is A. dongnaiensis Pierre, 1890. It is our impression that Aesandra is to be maintained as a separate genus of the Madhuceae (cf. Lam, Rec. Trav. Bot. Neerl. 36, 1939, 525).

We examined material from the following herbaria: British Museum (Natural History) at London (BM), Rijksherbarium at Leiden (L) and Muséum National d'Histoire Naturelle, Phanérogamie, at Paris (P) and are very much obliged to the authorities of these institutes for the loan of specimens and the hospitality enjoyed during our stay in 1955 at Paris and London.

In the taxonomical part the following abbreviations are used:
Lam $1925=$ H. J. Lam, The Sapotaceae etc. of the Dutch East Indies, Bull. Jard. bot. Bzg, sér. 3, 7, 1925, 1-289.
Lam $1927=$ H. J. Lam, Further studies etc., Bull. Jard. bot. Bzg, sér. 3, 8, 1927, 381 - 493.
The scales added to the drawings are given in millimeters.
Aesandra L. Pierre, Not. Bot. Sap., 1890, 1; Baillon, Hist. Plant. 11, 1891, 302; Dubard, Rev. Gén. Bot. 20, 1908, 204; Lam, Rec. Trav. Bot. Neerl. 36, 1939, 520; sub Payena: Engler, Pflanzenfam. 4, 1, Nachtr.,
${ }^{1}$ ) I-III in Blumea VI, 3, 1952, 547-595; IV-V in Blumea VII, 2, 1953, 364-412; IVa in Blumea VII, 3, 1954, 481-483; IIa, IVb, Va, VI-IX in Blumea VIII, 2, 1957, 201-513; X-XII in Nova Guinea N. S. 8, 1, 1957, 87-128; XIII-XVI in the present issue.


Fig. 1. Aesandra dongnaiensis, a. branchlet with leaves, b. branchlet with flowers, c. branchlet with young fruits, d. branchlet with mature fruits, e. nervation of leaf, f. flower, g. part of corolla, inside, h. stamens; i. ovary, j. fruit with three seeds, k. 1. seed, lateral view, k. 2. seed, ventral view, k. 3. seed, dorsal view, l. seed, crosssection. (schema. a, f.-i. from Chevalier 36874 , b, e, j.-l. adapted after a drawing of E. Delpy in the Paris herbarium, c.-d. from Pierre 32\&8).

1897, 272; Lam 1925, 130; sub Bassia: Lecomte, Flore Gén. Indo-Ch. 3, 7, 1930, 904; sub Madhuca: Baehni, Candollea 7, 1938, 416.

Corresponding with Payena in the abundant albumen and the thin flat cotyledons in the seed and with Madhuca in the nervation of the leaves and the number of sepals, petals, stamens and cells of the ovary. Differing from both genera by the number of seeds (3-6) in the fruit ${ }^{1}$ ). Monotypical.

Type species: Aesandra dongnaiensis Pierre.
Distr.: One species in Indo-China.

1. Aesandra dongnaiensis Pierre, l. c., 2; Dubard, 1. c., 204 - Payena dongnaiensis (Pierre) Engler, Engler, 1. c., 272; Lam 1925, 151; Lam 1927, 443 - Bassia dongnaiensis (Pierre) Lecomte, Lecomte, l. c., 904 - Madhuca dongnaiensis (Pierre) Baehni, Baehni, l.c., 416. On several labels were found the names Mixandra Pierre (= Diploknema Pierre), Centrorhiza Pierre MS and Centrorizia Pierre MS. - Fig. 1.

Trees up to 25 m , with reddish wood. Branchlets terete, thick, diameter $0.7-1 \mathrm{~cm}$, with rough bark. Stipules absent or caducous; sears of leaves and flowers crowded at regular distances, thick and tuberculate. Leaves crowded at tips of branchlets, obovate-lanceolate, widest somewhat above the middle, subcoriaceous, more or less acuminate, base cuneate; petioles $2-3.5 \mathrm{~cm}$ long, winged towards blade, canaliculate, glabrous, in young leaves densely ferruginous pubescent at base; blade 12-20 by $2.5-$ 5.5 cm , glabrous except traces of a short pubescence near the midrib both above and below; midrib somewhat sunken above, prominent below, conspicuous; secondary nerves less conspicuous above, prominent below, 13-16, starting from midrib at angles of about $60^{\circ}$, rather straight, curving towards apex near margin, ultimately thin and more or less parallel to edge of leaf; tertiary nerves comparatively faint, starting from midrib, forming a reticulate pattern. Inflorescences axillary, just below the leaves of the same season, multiflorous; pedicels $1.5-2.5 \mathrm{~cm}$ long, with short ferruginous pubescence, thickened towards flower. Calyx with very short tube, sepals 4 or $5^{2}$ ), $0.9-1.1$ by $0.4-0.5 \mathrm{~cm}$, ovate-lanceolate, apex bluntly acute, pubescent at both surfaces. Corolla exsert, $0.6-1.3 \mathrm{~cm}$ long, with short tube, which is $0.2-0.4 \mathrm{~cm}$ long, glabrous, lobes 11 or 12 , long ovate, blunt at tips. Stamens 18-24, pluriseriate, glabrous, $0.35-0.6 \mathrm{~cm}$ long, filaments not very short, thin, apex of connective acute or bifid, thecae oblong-triangular. Ovary hemispheroid, glabrous, cells 12, rarely 11, with one ovulum each, attached somewhat above the middle of the central axis; style $1.8-2.2 \mathrm{~cm}$ long, subulate, glabrous. Fruits $1.8-2.6$ by $2.5-3.2 \mathrm{~cm}$, rounded or ovate, never acuminate, young fruits more hemispheroid, glabrous; seeds $3-6,2-2.6$ by $1-1.2 \mathrm{~cm}$, oblong, laterally compressed, scar linear, narrow, 0.1 cm wide, not reaching as far as tips of seed; cotyledons flat and foliaceous, narrow, ovate-oblong, radicle comparatively long, some-

[^0]what exsert, inferior, thick; albumen abundant; thickened pedicels with traces of pubescence, $1.5-4 \mathrm{~cm}$ long, persistent incrassate sepals 0.5 by $0.6-1 \mathrm{~cm}$, style persistent in young fruits, generally broken off in mature fruits (herbarium specimens).

Lectotype specimen: Pierre 3228 in P.
Vern. names: Mo-cua, Mu-cua, Xung dao (Annamite).
Uses: Wood used by natives.
Distr.: Indo-China.
Indo-China. Bien-hoa, near cataracts of Tri huyen, Dong nai river, forest: Pierre seq8 (BM, L, P), fl. fr. Jan., height $20-25 \mathrm{~m}$; Bien-hoa only: Chevalier 36274 (P), fl. Jan.; Chuachan: Chevalier 36739 (P), fr. March.


[^0]:    ${ }^{1}$ ) Burckella 1, Ganua and Payena 1-2, Madhuca 1-3 seeds in the fruit.
    ${ }^{2}$ ) In one of the drawings of Lecomte accompanying Chevalier s6874 (P) I found the annotation "sur un autre specimen 7 lobes"; if correct, an unusual observation indeed.

