

antennæ brown, second joint shorter than the third, the latter sometimes twice as long as the former: dull plates (*plaques mates*) less developed with some strong, deep points, especially in the mesosternal angle: ostiolar canal very long, projecting beyond the transverse two-thirds of the metasternum (*Sign.*). Long, 5-7; broad, $2\frac{1}{2}$ -5 mill.

Common in Europe and Asia.

IV.—*A second series of New Species of Ficus from New Guinea.*—By
GEORGE KING, M. B., LL. D., F. L. S., *Superintendent of the Royal
Botanic Garden, Calcutta.*

[Received March 23rd;—Read April 6th, 1887.]

Since reading my paper before this Society “on some new species of *Ficus* from New Guinea,” in January last, I have received from the distinguished botanist and explorer, Signor Beccari of Florence, materials which enable me to describe seven additional new species from that island. The whole of these species were collected either by Sig. Beccari himself, or by his companion Count D’Albertis. These seven species all belong to the third of the sub-groups defined in my paper just referred to, namely, the group characterised by having “unisexual flowers, the males and galls being in one set of receptacles and the fertile female flowers alone occupying another set of receptacles.” In this group these seven species are distributed amongst the sections *Sycidium*, *Covellia*, *Eusyce*, and *Neomorphe*, for the distinguishing characters of which I must refer to the paper already mentioned.

SYCIDIUM.

Ficus conspicabilis, King. A tree (?) the young branches and leaf-buds covered with short deciduous yellow hairs; leaves broadly ovate or elliptic, the apex acute or shortly acuminate, the edges entire; the base broad, slightly unequal, sub-cordate, 7-nerved; primary lateral nerves about 6 pairs; secondary nerves sub-transverse, little curved; lower surface pubescent especially on the midrib and nerves, reticulations minute distinct; upper surface minutely lepidote; length of blade about 8 inches; petiole .8 in.; stipules densely covered with long, yellow, silky hairs. Receptacles large, shortly pedunculate, axillary, solitary, depressed-turbinate, both base and apex very concave, the surface wrinkled, rough, minutely tuberculate, deciduously hispid-tomentose; length from base to apex 1.1 in.; breadth 1.6 in.; umbilicus much

depressed, large, with numerous scales; basal bracts 3, broadly triangular; pedicel .2 in. long, hispid; female flowers sub-sessile or pedicellate, perianth of three distinct dark-coloured pieces; ovary ovoid, smooth; style terminal, longer than the ovary in the sessile, shorter than the ovary in the pedicellate flowers.

New Guinea: Sig. Beccari (Herb. Beccari, P. P. No. 651.)

Ficus mespiloides, King. A tree; the young shoots with long, tawny, adpressed, rather stiff hairs which are ultimately deciduous; leaves hard and rather harsh to the touch, sub-coriaceous, petiolate, elliptic, inequilateral, the apex shortly cuspidate; the edges, entire, recurved; the base narrowed, cordate or emarginate, sometimes oblique, 5 to 7-nerved; primary lateral nerves about 6 pairs, prominent beneath and minutely adpressed-pubescent as is also the midrib; the rest of the under surface puberulous and obscurely and minutely tuberculate; upper surface minutely lepidote, glabrous, rigid; length of blade 5 to 7 in.; petiole scurfy and with a few scattered adpressed fulvous hairs; 4 in. long; stipules ovate, acute, pilose externally, .4 in. long. Receptacles sessile, axillary, solitary, sub-globose (the base and apex truncate), the surfaces with many faint vertical ridges especially towards the apex, slightly verrucose, when young scurfy pubescent, when mature nearly glabrous; 1 in. long by 1.3 in. broad; the umbilicus large, wide, surrounded by a rigid but in no way projecting annulus; basal bracts 3, leaving an annular scar where they fall off: fertile female flowers ellipsoid, rather flat, smooth, the style long, terminal; perianth of 3 lanceolate, dark-coloured, free pieces; male and gall flowers unknown.

New Guinea on Mount Arfak: Sig. Beccari (Herb. Beccari, P. P. No. 962.)

COVELLIA.

Ficus conora King. A tree, all the young parts softly pubescent, the young branches pale-coloured; leaves petiolate, membranous, elongate-lanceolate, slightly inequilateral, the apex acuminate, the edges entire, the base narrowed, 3-nerved; primary lateral nerves 5 to 8 pairs, slightly prominent beneath and, like the midrib, tomentose; the rest of the under surface pale in colour and (in the adult state) very shortly hispid and minutely papillose (the papillæ white); upper surface covered with very minute white dots but no hairs; length of blade 4 to 7 inches; petioles .35 in. long, tomentose; stipules lanceolate, pubescent externally, .6 in. long. Receptacles borne on long, thin, flexuose, leafless, nearly glabrous, branches which issue from the base of the stem, solitary, long pedunculate, turbinate, the apex very broad and depressed, the sides faintly ridged, scurfy-pubescent, and with numerous flat

smooth warts, 1 in. across when ripe; umbilical scales large and thick; basal bracts none; peduncle thick, pubescent, bearing 3, small, broadly triangular bracts at or below the middle, varying in length from .5 in. to 1.25 in.; fertile female flowers pedicellate or sessile, the ovary subglobose, smooth; style elongate, subterminal; receptacular hairs few, pale, long: male and gall flowers unknown.

New Guinea, Ramoi: Beccari (Herb. Becc. P. P. No. 388).

Ternate, Acqui-Conora: Beccari.

The receptacles are often either partially or entirely covered by the soil.

Ficus Arfakensis, King. A tree, the young shoots scurfy and softly pubescent; leaves petiolate, sub-coriaceous, lanceolate, acute, gradually narrowed to the faintly 3-nerved base, edges entire; primary lateral nerves 6 to 8 pairs, obsolete on the upper, prominent on the lower surface, and like the midrib and secondary nerves adpressed pilose, the rest of the lower surface minutely covered with white tubercles, sparsely pilose; upper surface sparsely covered with adpressed whitish hairs: length of blade 4.5 to 7 inches; petiole pilose, 6 in. long; stipules linear-lanceolate, glabrous, nearly 1 inch long. Receptacles borne on long, ramos, slender branches which emerge from the base of the stem and apparently creep on or beneath the surface of the ground, pedunculate, ovoid, scabrid, slightly verrucose, .45 in. across; umbilical scales numerous, prominent; basal bracts 3, triangular.

Mount Arfak in New Guinea, at from 5000 to 7000 feet above the sea: Sig. Beccari (Herb. Becc. without number).

The receptacle-bearing branches often carry towards their extremities small leaves and modified stipules.

EUSYCE.

Ficus Comitis, King. Young branches glabrous; leaves membranous, elliptic, the apex shortly and narrowly cuspidate, the base broad, 3-nerved; primary lateral nerves about 8 pairs, diverging from the thick strong midrib at a wide angle, prominent on both surfaces but especially so on the lower which is thickly dotted with minute white tubercles; glabrous except on the midrib and primary nerves which are densely and softly puberulous, reticulations minute, very distinct: upper surface glabrous, thickly dotted with tubercles like those on the under surface, but slightly larger; length of blade 4 to 6 inches; petiole from .75 in. to 1.75 in. Stipules lanceolate, .6 in. long. Receptacles pedunculate, axillary, in pairs, sub-globose or sub-pyriform, the umbilicus rather prominent, gradually narrowed to the peduncle, adpressed-puberulous, slightly verrucose; about .25 in. across; basal

bracts none; pedicel .3 in. long, bearing 3 minute bracteoles below its middle.

New Guinea, Andai: D'Albertis (Herb. Beccari, P. Papuanæ No. 531).

This has been collected only by Count D'Albertis. Its affinities are with *F. chartacea*, Wall.

NEOMORPHE.

Ficus grandis, King. A tree; the young branches deciduously hispid-tomentose; leaves large, membranous, petiolate, ovate-elliptic, the apex acute, edges irregularly and coarsely crenate-dentate, the base rounded, not cordate, 7-nerved (2 being minute); primary lateral nerves about 8 pairs diverging from the midrib at rather an acute angle; the under surface finely reticulate and with numerous minute white papillae, rather softly and minutely pubescent especially on the midrib and nerves; upper surface scabrous from rather minute sub-adpressed hairs; length of blade 10 to 13 inches; petiole deeply channelled, pubescent, rather stout, 2.5 to 3.5 inches long; stipules ovate-acuminate, smooth inside, puberulous outside, about 1.2 inches long. Receptacles on short, thick, multibracteate, tubercled, leafless branches from the main stem, on long thin peduncles, depressed-globular or shortly pyriform, the surface slightly verrucose and scurfy but without hairs, red when ripe; 1.4 in. long and 2 inches broad; the apex very broad, flat, slightly depressed; umbilical scales numerous, prominent; basal bracts 3, large, ovate-triangular, acuminate, glabrous; peduncles nearly 3 inches long: male flowers with 1 or 2 stamens; anther ovate, on a thick filament; perianth of 3; obcordate, inflated, hyaline, pieces: gall flowers pedicillate or sessile, the style sub-terminal, perianth absent; fertile female flowers unknown.

New Guinea: Sig. Beccari (Herb. Becc. No. 601).

This vies with *F. Roxburghii*, in having the largest leaves and receptacles of any Asiatic member of the genus *Ficus*.

Ficus D'Albertisii, King. A tree; the young branches with annular swellings at the nodes, completely covered with closely adpressed, minute, rusty, pubescence; leaves broadly ovate or elliptic, sometimes obovate-elliptic, the apex acute, shortly cuspidate, the edges minutely dentate or sub-entire; base rounded, emarginate, or sub-cordate, sometimes unequal, 5-nerved; primary lateral nerves about 7 pairs; both surfaces closely covered with very minute adpressed hairs, the upper surface slightly harsh, the lower soft; length of blade about 9 inches, petiole about 1.5 in., pubescent, swollen at its insertion on the stem; stipules ovate-lanceolate, acuminate, adpressed-pubescent externally,

1.5 in. long. Receptacles in small clusters from leafless ebracteate tubercles on the stem, pedunculate, pyriform, the sides with numerous vertical ridges and clothed with short adpressed, apparently deciduous, scurfy pubescence; length 1.2 in., breadth 1 inch; the umbilicus large, closed by 5 broad, rounded scales; basal bracts 3, ovate, deciduous; peduncle stout, glabrous, .75 in. long; female flowers sessile or pedicellate, slightly rugose, the style long, terminal, hairy: male and gall flowers unknown.

Fly River, New Guinea, D'Albertis: (no number). Sumatra, Beccari: (Herb. Becc. P. S. No. 736.)

V.—*On some New Species of Ficus from Sumatra.*—By GEORGE KING, M. B., LL. D., F. L. S., Superintendent, Botanic Garden, Calcutta.

[Received April 1st;—Read April 6th, 1887.]

Amongst the collections of dried plants made by Mr. H. O. Forbes, during the journey in Eastern Sumatra of which an account is given in his interesting volume entitled, 'A Naturalist's Wanderings in the Eastern Archipelago,' I find four undescribed species. Three of these belong to the section *Covellia*, and one to *Eusyce*. They are as follows:—

COVELLIA.

Ficus brachiata, King. A tree, the young shoots adpressed-pilose: leaves thinly coriaceous, inequilateral, elliptic-lanceolate, the apex acute or shortly acuminate, the edges entire or sometimes irregularly and minutely undulate; base acute, obscurely 3-nerved; lateral primary nerves 8 to 10 pairs, sub-horizontal, rather prominent beneath and adpressed-pubescent, as are the midrib and secondary nerves, the rest of the lower surface puberulous or glabrous, the reticulations minute, indistinct; upper surface glabrous; length of blade 4 to 5 inches; petiole .5 in. long; stipules 1 in. long, glabrous. Receptacles borne on long leafless, glabrous, very ramous branches which issue from the stem near the ground, pedunculate, turbinate, verrucose, puberulous, about .5 in. across; the umbilical scales numerous and prominent; basal bracts 3, broadly ovate; peduncle .35 in. long; male and gall flowers not seen: fertile female flowers mostly sessile, without perianth, the style elongate, terminal and straight in young, lateral and curved in old, ovaries.

Mount Dempo, Eastern Sumatra, at elevations of about 4500 feet: Mr. H. O. Forbes (Herb. No. 2313).

This approaches *F. Miquelii*, but has smaller, narrower leaves; the receptacles are also smaller and borne on much longer branches.



King, George. 1888. "IV.—a Second Series of New Species of Ficus from New Guinea." *The journal of the Asiatic Society of Bengal* 56(I), 61–65.

View This Item Online: <https://www.biodiversitylibrary.org/item/110436>

Permalink: <https://www.biodiversitylibrary.org/partpdf/368285>

Holding Institution

California Academy of Sciences

Sponsored by

California Academy of Sciences Library

Copyright & Reuse

Copyright Status: Public domain. The BHL considers that this work is no longer under copyright protection.

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at <https://www.biodiversitylibrary.org>.