

# Synopsis of *Storckiella* Seem. (Fabaceae, Caesalpinioideae) with description of a new species and a new subspecies from New Caledonia

**Ivan C. NIELSEN**

Department of Biological Sciences, University of Aarhus,  
Ny Munkegade Building 540, DK-8000 Aarhus (Denmark)  
ivan.nielsen@biology.au.dk

**Jean-Noël LABAT**

Muséum national d'Histoire naturelle, Département Systématique et Évolution,  
USM 602/UMS 270 CNRS, Phanérogamie,  
case postale 39, 16 rue Buffon, F-75231 Paris cedex 05 (France)  
labat@mnhn.fr

**Jérôme MUNZINGER**

Laboratoire de Botanique, Institut de Recherche pour le Développement,  
BP A5, 98848 Nouméa cedex (New Caledonia)  
jerome.munzinger@noumea.ird.nc

## ABSTRACT

Notes on the morphological variation in New Caledonian *Storckiella* Seem. (Fabaceae, Caesalpinioideae) and a revision of the New Caledonian species are presented as well as a key to all four species of the genus. *S. neocaledonica* I.C.Nielsen, Labat & Munzinger is described as new and is characterized by having five to seven leaflets with obtuse and retuse apex, white to cream coloured petals, 10-14 stamens, and the ovary only puberulous in the proximal part and along both sutures. *S. pancheri* subsp. *acuta* I.C.Nielsen, Labat & Munzinger is described as new and is characterized by its acute-acuminate, chartaceous to rigidly chartaceous leaflets, unlike subsp. *pancheri* which has obtuse and retuse, coriaceous leaflets. One species, *S. comptonii* Baker f. is reduced to synonymy under *S. pancheri* Baill. subsp. *pancheri*.

## KEY WORDS

Leguminosae,  
Caesalpinioideae,  
*Storckiella*,  
New Caledonia,  
new species,  
new subspecies.

## RÉSUMÉ

*Synopsis de Storckiella Seem. (Fabaceae, Caesalpinioideae) et description d'une espèce et d'une sous-espèce nouvelles de Nouvelle-Calédonie.*

Des notes sur la variation morphologique de *Storckiella* Seem. (Fabaceae, Caesalpinioideae) en Nouvelle-Calédonie et une révision des espèces sont présentées, ainsi qu'une clé d'identification pour les quatre espèces connues du

**MOTS CLÉS**

Leguminosae,  
Caesalpinioideae,  
*Storckiella*,  
Nouvelle-Calédonie,  
nouvelle espèce,  
nouvelle sous-espèce.

genre. Une nouvelle espèce, *S. neocaledonica* I.C.Nielsen, Labat & Munzinger, est décrite, celle-ci se caractérise par ses feuilles à cinq ou sept folioles, avec un apex obtu et retus, ses pétales blanc à crème, ses 10-14 étamines et son ovaire uniquement pubéruleux dans sa partie proximale et le long des deux sutures. *S. pancheri* subsp. *acuta* I.C.Nielsen, Labat & Munzinger est décrite comme nouvelle sous-espèce et se distingue par ses folioles aiguës-acuminées et chartacées ou chartacées rigides, contrairement à la subsp. *pancheri* dont les folioles sont obtuses, retuses et coriaces. Une espèce, *S. comptonii* Baker f., est mise en synonymie avec *S. pancheri* Baill. subsp. *pancheri*.

**INTRODUCTION**

The genus *Storckiella* belongs to the tribe Cassieae, subtribe Dialiinae IRWIN & BARNEBY (1981). It was described by SEEMAN (1861) and named in honour of his assistant Jacob STORCK. The genus, then monotypic, was based on *S. vitiensis* from Fiji. *Storckiella vitiensis* was described as having 10-12 stamens, but according to SMITH (1985) specimens with up to 15 stamens have now been found. The low number of stamens (four) in New Caledonian material, which was sent to H. BAILLON in Paris by MUELLER prompted BAILLON (1869) to base the second species in the genus *Storckiella pancheri* on that material. It was referred to the section *Doga*. BAILLON (1869: 205) noted that the local name for the species was *Doga*, and thus, that name might serve as generic name for the New Caledonian species, if its characters later on proved to be sufficient: “[...] Si l’on juge des caractères suffisants pour l’élever plus tard au rang de genre, on devra la nommer *Doga Pancheri*”. BAILLON thus did not describe *Doga* as a new genus but only as a section of *Storckiella*. BAKER (1921) described a third species *S. comptonii* Baker f. and referred it to “Sect. II *Doga* Baill.”. GUILLAUMIN (1936) doubted that *S. comptonii* was new, but nevertheless kept it as a distinct species in his analytical and synoptic flora of New Caledonia (GUILLAUMIN 1948). ROSS & HYLAND (1983) described the fourth species *S. australiensis*, which is endemic to Queensland, Australia. GUILLAUMIN (1911, 1948) expanded the range of *S. vitiensis* to including material from New

Caledonia, although in the first of these papers he had noted the difference in leaflet morphology between the specimens from Fiji and those from New Caledonia. The range extension of *S. vitiensis* was considered doubtful by A.C. SMITH (1985: 100) who, after correspondence with the late H.S. MACKEE, indicated that the New Caledonian specimens with 10 or more stamens belong to a distinct species, which is described below.

**SYSTEMATICS****STORCKIELLA** Seem.

Bonplandia 9: 363, t. 6 (tab. XIII) (1861); Seeman, Fl. Vit.: 68 (1865); Bentham & Hooker, Gen. Pl. 1/2: 571 (1865); Baillon, Adansonia 9: 204 (1869); Taubert in Engler & Prantl, Nat. Pflanzenfam. 3 (3): 164 (1892); Guillaumin, Bull. Soc. bot. France 83: 108 (1936); Guillaumin, Flore analytique et synoptique de la Nouvelle-Calédonie: 156 (1948); Hutchinson, Gen. Pl. 1: 228 (1964); Irwin & Barneby in Polhill & Raven (eds), Adv. Leg. Syst. 1: 101 (1981); Smith, Fl. Vit. Nova: 3: 97 (1985); Ross, Fl. Australia 12: 73 (1998). — Type: *Storckiella vitiensis* Seem.

*Storckiella* sect *Doga* Baill., Adansonia 9: 204-205 (1870); Hist. Pl. 2: 132 (1870); Baker, J. Linn. Soc., Bot. 45: 297 (1921). — Type: *Storckiella pancheri* Baill.

Unarmed trees or tall shrubs. Stipules small and caducous. Leaves imparipinnate; leaflets opposite or alternate, petiolulate, chartaceous or coriaceous. Inflorescence paniculate, terminal or axillary. Flowers bisexual, actinomorphic or

nearly so, bracts and bracteoles caducous. Sepals 3-5 subequal or the outer two slightly larger, imbricate. Petals 3-5, with upper inner petal sometimes absent, alternating with the sepals, subequal. Stamens 4-10(-15), free, all fertile; filaments filiform; anthers linear, basifixed; locules opening at the apex by short lateral slits. Ovary sessile or nearly so, free, 1-chambered, 4-6-ovu-

late; style shortly curved; stigma terminal, small. Fruit oblong to reniform or slightly falcate, laterally compressed, winged along the ventral suture, 2-valved, coriaceous, dehiscent but sometimes tardily so. Seeds compressed, 1-5.

A genus of four species, one endemic to North Queensland, Australia, one endemic to Fiji, and two species endemic to New Caledonia.

### Key to the species of *Storckiella* Seem.

1. Sepals 5, rusty sericeous, filaments 0.8-1.2 mm long, base of leaflets cuneate. Queensland, Australia ..... 3. *S. australiensis*
- 1'. Sepals (3-)4-5, yellowish puberulous, filaments 6-10(-11) mm long, base of leaflets obtuse, truncate or cordate ..... 2
2. Petals broadly elliptic, more or less oblique, 4.7-5 mm wide, ovary glabrous, leaflets acuminate to cuspidate, not lanceolate. Fiji ..... 4. *S. vitiensis*
- 2'. Petals narrowly elliptic to lanceolate(-linear), 1.6-4.5 mm wide, ovary woolly-sericeous all over or puberulous along the sutures and in the proximal part only, leaflets obtuse to acute, if acuminate then lanceolate. New Caledonia ..... 3
3. Stamens 10-14, ovary puberulous in the proximal portion and along the sutures only, flowers white to cream, leaflets 5-7 per pinna ..... 1. *S. neocaledonica*
- 3'. Stamens 4-5, ovary woolly to sericeous throughout, flowers yellow, leaflets 7-13 per pinna .... 2. *S. pancheri*

### Clé des espèces de *Storckiella* Seem.

1. Sépales 5, roux soyeux, filets des étamines de 0,8-1,2 mm de longueur, base des folioles cunée. Queensland, Australie ..... 3. *S. australiensis*
- 1'. Sépales (3-)4-5, jaunâtres pubérulents, filets des étamines de 6-10(-11) mm de longueur, base des folioles obtuse, tronquée ou cordée ..... 2
2. Pétales largement elliptiques, plus ou moins obliques, 4,7-5 mm de largeur, ovaire glabre, folioles acuminées à cuspidées, non lancéolées. Fiji ..... 4. *S. vitiensis*
- 2'. Pétales étroitement elliptiques à lancéolés(-linéaires), 1,6-4,5 mm de largeur, ovaire complètement laineux-soyeux ou pubérulent uniquement dans la partie proximale et le long des sutures, folioles obtuses à aiguës, si acuminées alors lancéolées. Nouvelle-Calédonie ..... 3
3. Étamines 10-14, ovaire pubérulent uniquement dans la partie proximale et le long des sutures, fleurs blanches à beiges, 5-7 folioles par feuille ..... 1. *S. neocaledonica*
- 3'. Étamines 4-5, ovaire complètement laineux à soyeux, fleurs jaunes, 7-13 folioles par feuille .... 2. *S. pancheri*

**1. *Storckiella neocaledonica*** I.C.Nielsen, Labat & Munzinger, **sp. nov.**

*S. vitiensis* auct., non Seem., Guillaumin, Bull. Soc. Bot. France 83: 108 (1936); Fl. Analytique et Synoptique de la Nouvelle-Calédonie: 156 (1948).

*Species nova generis Storckiellae combinatione characterum sequentium distinguibilis: foliis 5-7-foliolatis, foliolis ad apicem obtusis retusisque, sepalis 4-5 anguste ellipticis*

*ad oblongis, petalis 4-5 albis ad cremeis, linearibus ad oblongis, staminibus 10-14, filamentis 7(-11) mm longis, ovario ad basin et secus suturas utrinque puberulo.*

TYPUS. — Labat, Munzinger, D. & I. Létocart, C. Létocart & B. & S. Létocart 3524, Nouvelle-Calédonie, Province Sud, Vallée de la Tontouta, 21°56'31"S, 166°17'12"E, 50 m, 21 nov. 2004, fl. (holo-, P [P00454789]; iso-, AAU, G, K, MO, NOU, NY, P [P00454790, P00454788], Z).

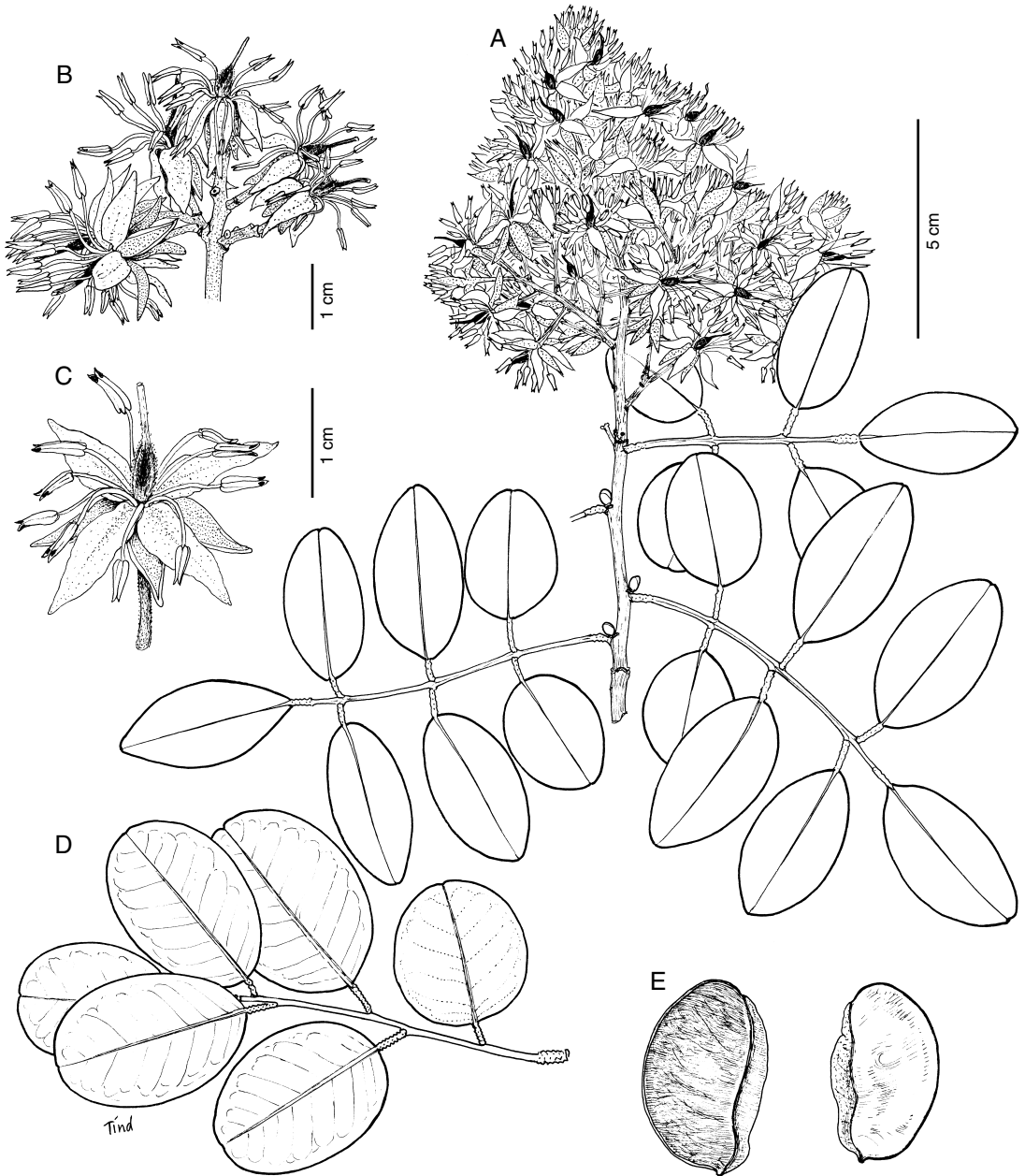


FIG. 1. — *Storckiella neocaledonica* I.C.Nielsen, Labat & Munzinger: **A**, distal portion of flowering branch; **B**, lateral branch of inflorescence; **C**, flower; **D**, leaf of fruiting specimen; **E**, pod, closed (left), opened (right). A-C, *Labat et al.* 3524 (holotype, P; iso-, AAU); D, E, *MacKee* 39849 (AAU).

Tree up to 15 m tall (sometimes reported as multi-stemmed and shorter), trunk at least 16 cm in diameter, cylindrical, straight, bark grey, lightly fissured. Branches terete, puberulous in the distal parts, glabrescent. Stipules caducous, yellow, elliptic, densely puberulous,  $10 \times 4$  mm. Leaves pinnate, rhachis 6-7.5 cm long, finely and shortly puberulous, with 5-7 opposite or alternate leaflets; leaflets coriaceous to rigidly chartaceous, ovate-broadly elliptic or obovate-elliptic,  $(2.8\text{--}2.9\text{--}5.7\text{--}(7.5)) \times (1.8\text{--}2\text{--}3.9)$  cm, base obtuse to truncate, apex obtuse, retuse, lamina glabrous above, shortly appressed puberulous to glabrous beneath, upper surface with inconspicuous veins, lower with prominent and raised ones, c. 9 principal lateral veins per leaflet-half.

Inflorescence a terminal panicle  $(6\text{--})9\text{--}18 \times 5.5\text{--}18$  cm, densely puberulous, pedicel 7-9 mm long, up to 1.5 cm in fruit, hypanthium 1-1.5 mm long. Buds ellipsoid. Bract and bracteoles caducous, ovate, concave, 1.5-3 mm long, densely puberulous. Sepals 4(5) light yellow, narrowly elliptic-lanceolate-oblong,  $(7.5\text{--})8\text{--}9 \times 2.2\text{--}3.5$  mm, densely puberulous outside and with glandular hairs and sparsely puberulous inside. Petals 4-5, white to cream, linear-lanceolate to oblong, acute,  $10\text{--}13 \times 2\text{--}4$  mm, ciliate along the main vein. Stamens 10-14, yellow to ochre or orange, filaments 7-11 mm long, anthers  $(4\text{--})5\text{--}6$  mm long. Ovary c. 4-5 mm long, puberulous in the proximal part and along both sutures; style 5.5-7 mm long. Pod sessile or almost so, valves parchment-like, glabrous, light brown outside, pale silky shiny inside, irregularly reniform to obovate,  $4.5\text{--}7.5 \times 2.5\text{--}3.6$  cm, ventral wing to 0.7 cm wide, tapering towards both ends, few-seeded, and apparently only the apical seed maturing. Seeds dark brown, obconical, slightly asymmetric, compressed,  $8\text{--}9 \times 7\text{--}7.5 \times 2.5\text{--}3$  mm, funicle S-shaped, 3 mm long. — Figs 1; 4C-F.

ECOLOGY. — Recorded from forest and gallery forest on serpentine or ultramafic soil at altitudes up to 200 m. The second and the third authors observed the flowers to be visited by the bird *Lichmera incana incana* (Latham, 1790) (“méliphage à oreillons gris”) and the introduced bee *Apis mellifera* Linnaeus, 1758. Other flower visi-

tors could probably be observed on this very attractive plant.

PHENOLOGY. — Flowering only in November and December, fruiting from January to April. Apparently this species is not flowering every year and very sporadically when doing so.

NOTES. — *Storckiella neocaledonica* is the only member of the genus with white to cream petals. It is frequent in the Tontouta river basin (including the lower slopes of Mt Humboldt) and along Poya and Dumbéa rivers. The majority of the specimens have four sepals, but *MacKee* 39849 and 43372 have flowers with five sepals, but do not differ in other aspects.

CONSERVATION STATUS. — Using the data available and applying the IUCN Red Data criteria (IUCN 2001), we assign *Storckiella neocaledonica* a threat status of Endangered (EN, B1abii; B2abii) because of its restricted area. Plus, the plant occurs in low altitude vegetation which appears to be under immediate threat and reduction, mainly by fire (North Dumbea valley was strongly damaged by fire in 2004). No population known of *S. neocaledonica* occurs in a reserve.

PARATYPES. — Nouvelle-Calédonie. *D'Alleizette Herb. 2NC*, Nouméa, 1910, fl. (P); *Baumann-Bodenheim 15549*, Tontouta moyenne, 24 Sept. 1951, st. (P, Z); *Blanchon 1294*, vallée de la Tontouta, 15 Dec. 1964, fl. (NOU, P); *Brinon 1096*, basse Tontouta, riverside on rocks, 150 m, from water's edge, 21 Dec. 1981, st. (NOU); *Brinon 1097*, basse Tontouta, River bank on peridotite, 22 Dec. 1980, fl. (NOU); *Brinon 1194*, s. loc. (NOU); *Däniker 2969*, Tontouta, Baum mit gelben Blüten, 20 Nov. 1924, fl. (Z); *Franç 33*, Dumbéa, Dec. 1904, fl. (G); *Jaffré & Rigault 3000*, bassin de la Tontouta, forêt de talweg, sol érodé sur roche ultrabasique, 200 m, 6 Dec. 1988, fl. (AAU, MO, NOU, P); *Labat et al. 3520*, Province Sud, vallée de la Tontouta,  $21^{\circ}58'13''\text{S}$ ,  $166^{\circ}15'27''\text{E}$ , 43 m, 21 Nov. 2004, fl. (AAU, K, MO, NOU, P); *Le Rat 975*, s. loc., fl. (P); *MacKee 27326*, Poya, Avangui, Sept. 1973, st. (AAU, K, MO, NOU, P); *MacKee 29490*, basse Tontouta, forêt sur pente rocheuse serpentineuse, 9 Dec. 1974, fl. (AAU, CANB, E, K, L, MO, NOU, P); *MacKee 29590*, Poya, Avangui, 200 m, ravin boisé, terrain serpentineux, 28 Dec. 1974, fl. (NOU, P); *MacKee 29726*, basse Tontouta, forêt sur pente rocheuse serpentineuse, 30 Jan. 1975, fr. (AAU, CANB, G, K, L,

MO, NOU, P); *MacKee 29999*, Poya, Avangui, 100-200 m, ravin boisé, terrain rocheux serpentineux, 9 Apr. 1975, fr. (AAU, N, CANB, K, L, MO, NOU, NSW, P, WELT); *MacKee 39849*, basse Tontouta (rive gauche), 30 m, maquis, terrain serpentineux, 3 Nov. 1981, bud, fr. (AAU, NOU, P); *MacKee 43372*, Tontouta, vallée de la Ouano, terrain serpentineux, 150 m, 28 Nov. 1986, fl. (AAU, MO, P); *MacKee 46431*, vallée de la Dumbéa, forêt sur forte pente, sur roches ultramafiques, 100 m, 7 Dec. 1994, fl. (AAU, CAM, B, BM, BR, E, G, K, MA, NOU, NY, P, WAG, Z); *McPherson 3470*, forested slopes of Mt Humboldt, c. 28 air-km N of Nouméa, 21 Dec. 1980, fl. (AAU, MO); *McPherson 3471*, forested slopes of Mt Humboldt, c. 28 air-km N of Nouméa, riverside forest remnant, c. 50 m, 21 Dec. 1980, fl. (AAU, MO, NOU, P); *McPherson 4238*, Along Tontouta River and its tributary the Kalouéhola, 15-150 m, riverside scrub, 20 Oct. 1981, bud (AAU, MO, NOU, P); *Schmid 5230*, vallée de la Tontouta, à basse altitude, ripicole sur berges plus ou moins rocheuses en zone ultrabasiq, 12 Dec. 1974, fl. (NOU, P); *Suprin 952*, basse vallée de la Tontouta, 27 Nov. 1980, fl. (NOU); *Veillon 6017*, rive droite de la Tontouta, 7 Oct. 1990, st. (NOU).

## 2. *Storckiella pancheri* Baill.

*Adansonia* 9: 205 (1869); Guillaumin, Bull. Soc. Bot. France 83: 308 (1936); Fl. Analytique et Synoptique de la Nouvelle-Calédonie: 156 (1948). — *Doga pancheri* (Baill.) Baum.-Bod., Syst. Fl. Neu-Caledonien 5: 77 (1989), *nom. inval.* — Lectotype: *F.v. Mueller 11*, “North end of New Caledonia, tree 18-20 feet, base of mountains, flowers yellow” (P); paratypes *F. v. Mueller 2 & 28* (P), mounted on the same sheet as the lectotype.

This species is apparently restricted to the main island of New Caledonia. *Storckiella pancheri* is based on a F. VON MUELLER collection distributed from MEL which is deposited in the Paris herbarium. The original label from MEL reads: “Cassia/No 2 – North end of New Caledonia – Tree 18-20 feet/base of mountains – flowers yellow”.

According to kind information from D. MURPHY (MEL), MUELLER never visited New Caledonia, but he received specimens collected by VIEILLARD and PANCHER, which he sent on to Paris.

The sheet in Paris have three leaves without tags mounted in the upper half and an inflores-

cence tagged with no. 28 in the lower left half, and an inflorescence with a single leaf tagged no. 11 in the lower right half. The Herb. Mus. Paris label reads: “Nouvelle Calédonie / *Storckiella pancheri* H. Bn. / M. F. Mueller / no. 2, 28, 11”. As F. VON MUELLER no. 11 matches the original description, and has both a leaf and an inflorescence we select that as lectotype. The types of *S. pancheri* and *S. comptonii* were collected in the northern part of New Caledonia and though the F. VON MUELLER specimens are fragmentary the leaflets match those of the type of *S. comptonii*. The two were formerly distinguished by the form and width of the leaflets: *S. pancheri* with oblong or oblong-lanceolate leaflets 12-16(-18) mm wide, and *S. comptonii* with elliptic or ovate-elliptic leaflets 20-25 mm wide. However, the lectotype and paratypes of *S. pancheri* have coriaceous leaflets that are between 12 and 28 mm wide, thus overlapping the size range of those of the type of *S. comptonii*. The collections made in the northern part of the island since then also justify that *S. comptonii* should be reduced to synonymy under *S. pancheri* as was suspected by GUILLAUMIN (1936: 308). In the northern part of the island the specimens have coriaceous leaflets with obtuse and retuse apices, as can also be observed in the types of *S. comptonii* and *S. pancheri*. In the central and southern part of the island the specimens have chartaceous to rigidly chartaceous leaflets with broadly acute, acute to acuminate apices. It has been decided to assign subspecific rank to those two entities, because they too have different habitat preferences, the former being found in scrub and open maquis, and the second both in forest, and maquis. Moreover subsp. *pancheri* is found in the northern part of the island, unlike subsp. *acuta*, which is found in the central and southern part. *McKee 39369* (AAU, P), which was collected at Col d’Amos in gallery forest on shale is a 20 m tall tree with very young foliage. It is referred to subsp. *pancheri* with some hesitation, and might represent an intermediate form to subsp. *acuta*.

### Key to the subspecies of *Storckiella pancheri* Baill.

- Apex of leaflets obtuse and retuse, leaflets coriaceous ..... 2a. *S. pancheri* subsp. *pancheri*
- Apex of leaflets acute-acuminate (to broadly acute), leaflets chartaceous to rigidly chartaceous .....  
..... 2b. *S. pancheri* subsp. *acuta*

### Clé des sous-espèces de *Storckiella pancheri* Baill.

- Folioles à apex obtus ou retus, folioles coriaces ..... 2a. *S. pancheri* subsp. *pancheri*
- Folioles à apex aigu-acuminé (à largement aigu), folioles papyracées à papyracées rigides .....  
..... 2b. *S. pancheri* subsp. *acuta*

#### 2a. *Storckiella pancheri* Baill. subsp. *pancheri*

*S. comptonii* Baker f., J. Linn. Soc. Bot. 45: 296 (1921); Guillaumin, Bull. Soc. Bot. France 83: 308 (1936); Fl. Analytique et Synoptique de la Nouvelle-Calédonie: 156 (1948). — Type: *Compton 2362*, New Caledonia, Poumé, 400 ft, occasional in scrub (holo-, BM; iso-, P); *syn. nov.*

Shrub or small tree 2-8 m high, up to 30 cm in diameter. Branches puberulous in the distal parts, glabrescent. Stipules caducous, not observed. Leaves: rachis 6-12 cm long, puberulous, petiolules 4-5 mm long, puberulous; leaflets (7-)9(-11) per pinna sometimes reduced to only 5 on the uppermost leaf below the inflorescence, (chartaceous-)coriaceous, (lanceolate-)oblong-ovate(-obovate) or broadly elliptic, 3-5.1 × 1.4-2.7(-3.5) cm, base obtuse, truncate, subcordate or cordate, apex obtuse, retuse, upper surface green, glabrous, lower surface green to brownish, glabrous to appressed puberulous; lateral veins inconspicuous to prominulous above, prominent beneath, about nine principal lateral veins per leaflet-half. Inflorescence a terminal panicle to c. 12 × 9 cm, densely puberulous, bracts 6 × 3 mm, obtuse, concave, early caducous, pedicels 6-7 mm long, puberulous, hypanthium c. 1 mm long, puberulous. Perianth and stamens yellow. Sepals 4, narrowly oblong-falcate to oblong, acuminate(-acute), rarely V-shaped at the apex, (6-)10-14 × 1.2-3.2 mm, appressed puberulous on the outside, with nectariferous tissue and puberulous on the inside. Petals 4, oblanceolate, linear or oblong, obtuse, (8-)10-13 × 1.2-

2.5 mm, puberulous along the main vein. Stamens 4, filaments (5-)6-10 mm long, anthers (3.5-)4-6 mm long. Ovary brown sericeous to woolly throughout, 3-4 mm long, style 5-7.5 mm long, with a few appressed hairs. Pod broadly to more narrowly reniform, 2.3-6.5 × 2.6-4 cm, wing 0.4-1.1 cm wide. Seeds only 1(-2) maturing per fruit, dark brown, obconic, slightly asymmetric, compressed, 8-10.5 × 7-8.5 × 4 mm. — Figs 2; 4B.

DISTRIBUTION. — Northern part of New Caledonia.

ECOLOGY. — Found in open scrub and maquis on serpentine and ferruginous soils, in rocky hillsides and in alluvial vegetation. Found at altitudes up to 600 m.

PHENOLOGY. — Flowering from June to January and fruiting from November to June.

CONSERVATION STATUS. — Using the data available and applying the IUCN Red Data criteria (IUCN 2001), we assign *Storckiella pancheri* subsp. *pancheri* a threat status of Low Risk (LR).

MATERIAL EXAMINED. — Nouvelle-Calédonie. *Balansa 3328*, Mont Poumé, dans les terrains ferrugineux, fr. (P); *Däniker 1296*, at the foot of Mt Kaala, 20 Feb. 1925, fr. (Z); *Foster 170*, on road between Balade and Col d'Amos, 13 June 1956, fl. (P); *Guillaumin & Baumann-Bodenheim 9585*, Mt Koniambo, serpentine, 21 Dec. 1950, fl. (Z); *Jaffré 482*, Boulinda, végétation de bord de rivière, 70 m,

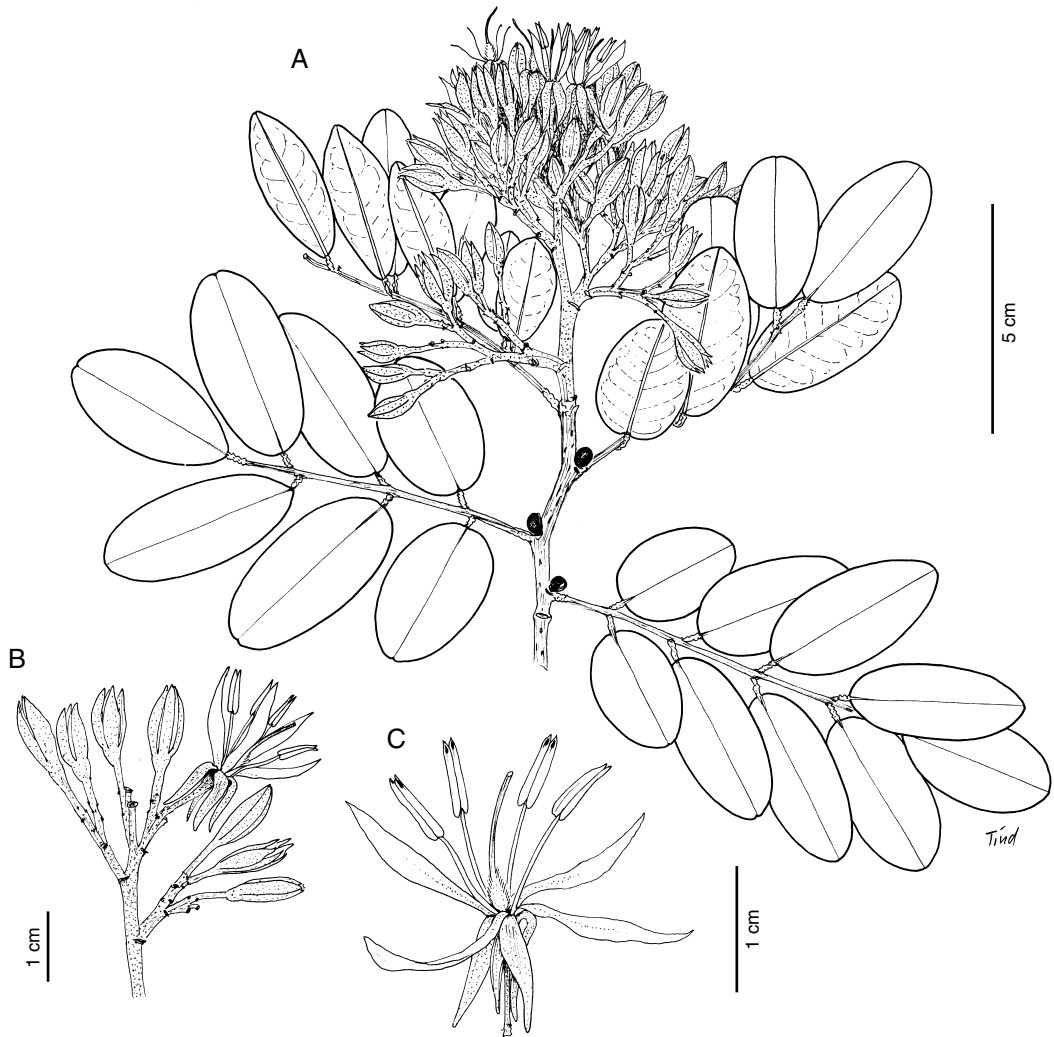


FIG. 2. — *Storckiella pancheri* Baill. subsp. *pancheri*: **A**, distal portion of flowering branch; **B**, lateral branch of inflorescence; **C**, flower. McPherson 3501 (AAU).

9 Nov. 1971, fl. (NOU, P); *Jaffré 1004*, Massif du Boulinda, 8 Nov. 1972, fl. (NOU); *Jaffré 2175*, *ibid.*, col de Nekoro, 9 Nov. 1972, bud (NOU); *Litaudon, Adenot & Maituku 1038*, Poum base, 13/18 Dec. 1999, fl. (NOU); *MacDaniels 2244*, Nepoui Valley, serpentine hill, 100 m, 19 Nov. 1944, fl. (P); *MacKee 14540*, Col de Nekoro, entre Népoui et Poya, vers 100-200 m, pente en terrain serpentineux, 16 Mar. 1966, fr. (NOU); *MacKee 16161*, Mt Kaala (Pente nord), 700 m, maquis sur terrain serpentineux, 25 Dec. 1966, fl. (AAU, B, BM, CANB, G, K, L, MA, MO, NOU, P); *MacKee 16807*, Pouembout, base ouest du plateau de Tiéa, vers 300 m, maquis sur allu-

vions serpentineux, 22 May 1967, fr. (K, NOU, P); *MacKee 20372*, contrefort sud du Kopeto, 600 m, Mar. 1969, fr. (AAU, L, MO, NOU, P); *MacKee 23823*, Néhoué, Pic Ougne, 250-360 m, 28 May 1971, fr. (AAU, K, L, NOU, P); *MacKee 29537*, Mont Koniambo, base S.O., maquis sur terrain rocheux serpentineux, 26 Dec. 1974, fl. fr. (K, L, MO, NOU, P); *MacKee 30587*, Voh, Katepahié, 300 m, maquis, terrain serpentineux, 1 Jan. 1976, fl. (L, NOU, P); *MacKee 34502*, Ouaco, Tsiba, 400 m, 31 Dec. 1977, fl. (AAU, G, K, L, MO, NOU, P); *MacKee 34504*, *ibid.*, fr. (AAU, L, K, NOU, P); *MacKee 35131*, Tinip, 12 May 1978, fr. (NOU, P);



*MacKee 35371*, Taom, Ouéou, 4 June 1978, fr. (K, L, NOU, P); *McPherson 3501*, Mt Kaala, S of Koumac, Maquis, c. 650 m, 7 Jan. 1981, fl. (AAU, MO, NOU, P); *McPherson 5604*, along old road up Mt Koniambo, S of Voh, scrub and low dense forest, c. 300 m, 29 Mar. 1983, fr. (MO, NOU, P); *Munzinger & Labat 2598*, Koniambo, 21°00'54"S, 164°44'10"E, 80 m, 19 Nov. 2004, fl. (AAU, K, MO, NOU, P); *Pusset 159*, Mt Kaala, 550 m, 25 Nov. 1980, st. (NOU); *Sarlin 224*, Ponerihouen, fl. (P); *Schmid 4375*, Koniambo 100-500 m, 19 Dec. 1972, fl. (NOU); *Sévenet-Pusset 1649*, entre Ouaco and Gomen, au-dessous de Tsiba, 13 Dec. 1978, fl. (NOU); *Simmons & Pintaud 1875*, Province Nord, rivière Con fiance, W de Koné, 21°02.32'S, 164°48.52'E, 115 m, fl. (NOU); *Virost 1343*, base des versants sud du Mont Kaala, taches plus ou moins forestières dans des petits talwegs, sol serpenteux, 6 Nov. 1943, st. (P).

**2b. *Storckiella pancheri* Baill. subsp. *acuta***  
I.C.Nielsen, Labat & Munzinger, **subsp. nov.**

*A subspeciei pancheri differt foliis (anguste ellipticis-lanceolatis(-oblongis) 0.9-2.8 mm latis, apicibus foliolorum acutis-acuminatis.*

**TYPUS.** — *Labat, Munzinger & D. & I. Létocart 3490*, Nouvelle-Calédonie, Province Sud, Route de Yaté, 22°09'35"S, 166°52'20"E, 200 m, 14 Nov. 2004, fl. (holo-, P [P00454753]; iso-, AAU, K, MO, NOU, P [P00454754]).

Shrub or tree from 2 m and up to 30 m tall, trunk up to 12 m tall and up to 80 cm in diameter, cylindrical, straight, bark brown-grey. Branches puberulous by scattered semi-erect hairs in the distal parts, glabrescent. Leaves: rhachis 3.5-9 cm, subglabrous; petiolules 2 mm long, glabrous; leaflets 9-13 per pinna sometime reduced to only 7 in the distal leaves below the inflorescence, chartaceous to rigidly chartaceous, (narrowly elliptic-)ovate-lanceolate(-oblong), 2.7-6.2 × 0.9-2.6 cm; base obtuse to truncate or cordate (or half truncate/half rounded); apex acute(-acuminate), upper surface glabrous, green, lower surface inconspicuously puberulous(-densely puberulous), green or sometimes yellowish brown; lateral veins inconspicuous above and prominulous beneath, c. 7-8 principal lateral veins per leaflet half. Inflorescence of dense terminal panicles, which are densely puberulous to

tomentose and up to c. 13 × 12 cm; bracts and bracteoles 6 × 3 mm, ovate, concave, acute apically, early caducous; pedicel 2-5 mm long, puberulous, hypanthium c. 1-2 mm long. Buds fusiform. Perianth and filaments bright yellow. Sepals 4, slightly unequal, narrowly oblong to lanceolate(-subfalcate), acute, (7-)9-12 × 1.2-2.4 mm, sparsely puberulous on the abaxial surface, puberulous and with nectar-secreting tissue on the adaxial surface. Petals 4, narrowly oblong to lanceolate, 9-13 × 2-3.1 mm, obtuse to acute, puberulous along the main vein. Stamens 4, filaments 6-11.1 mm long, anthers 4-5.7 mm long. Ovary white woolly, 3-5 mm long, style 5-8 mm long, with scattered, appressed hairs mainly in the proximal portion. Pod light brown outside, pale silky shiny inside, reniform to elliptic, rounded at both ends when mature, c. (3-)3.5-11 × (2-)2.8-4.5 cm, appressed puberulous, sometimes densely so, wing 0.5-1.1 cm wide. Seeds up to four per pod, but usually only one maturing, dark brown, obconic, lightly asymmetric, compressed, c. 11 × 9 × 2.5 mm. — Figs 3; 4A.

**DISTRIBUTION.** — Central and Southern New Caledonia.

**ECOLOGY.** — This subspecies is a locally common, sometimes emergent tree, in forest, gallery forest, and maquis, on both serpentine rocks, slates and ultramafic soils, alt. 20-300 m, once recorded at 500 m. The second and the third authors observed the flowers to be visited by birds, such as *Lichmera incana incana* (Latham, 1790) ("méliphage à oreillons gris"), *Phylidonyris undulata* (Sparrman, 1787) ("méliphage barré"), *Trichoglossus haematodus deplanchei* (Linnaeus, 1771) ("loriquet à tête bleue"), and by the endemic bee *Austronomia sichelii* Vachal, 1897, and the introduced *Apis mellifera* Linnaeus, 1758. The list of floral visitors is probably not exhaustive.

**VERNACULAR NAMES.** — Frêne, Faux-frêne, Kengue.

**NOTES.** — The dimensions of the leaves of the lower parts of the trees have not been included in

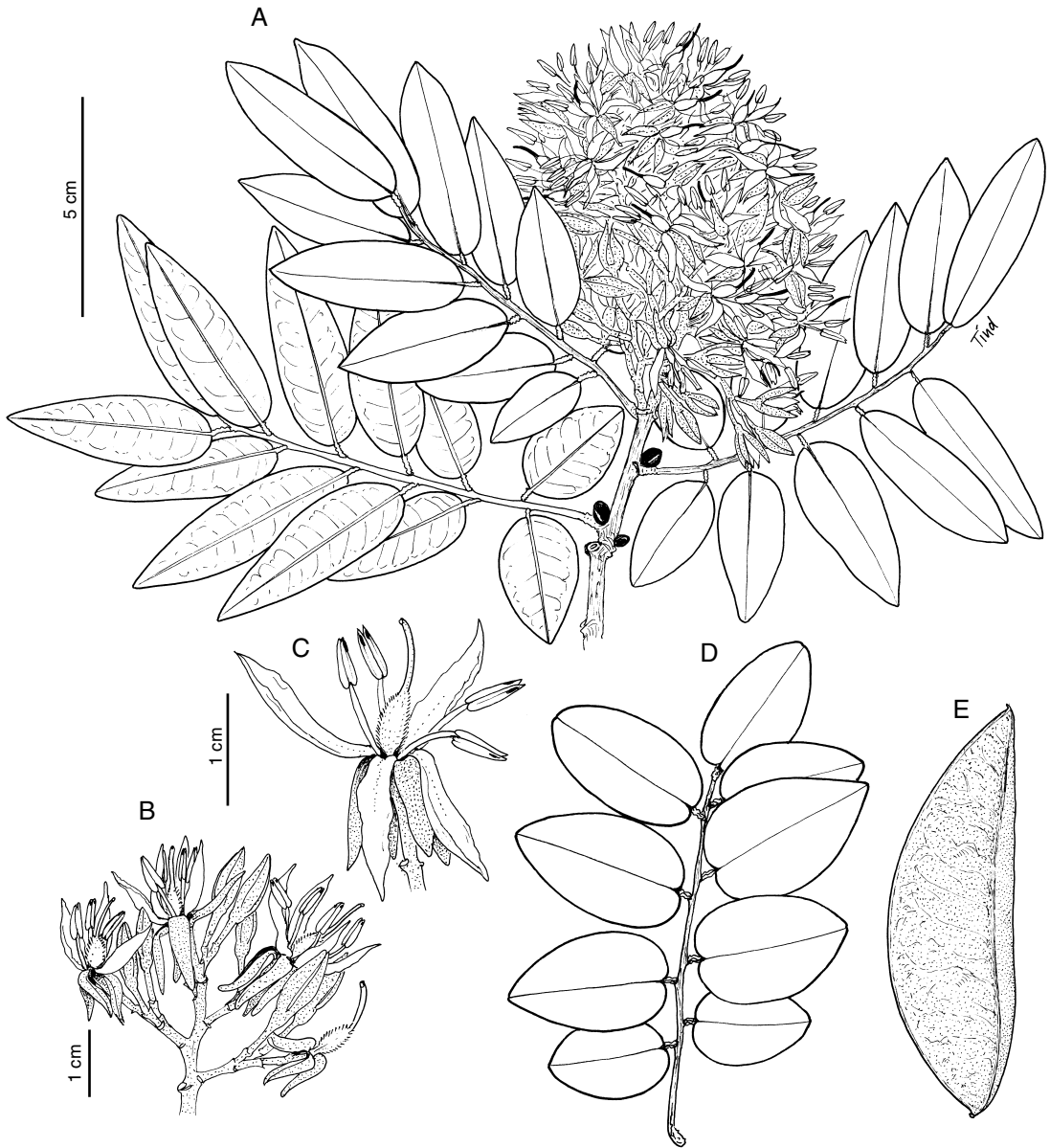


FIG. 3. — *Storckiella pancheri* Baill. subsp. *acuta* I.C.Nielsen, Labat & Munzinger: **A**, distal portion of flowering branch; **B**, lateral branch of inflorescence; **C**, flower; **D**, leaf of form with cordate leaflets; **E**, young pod. A-C, Labat *et al.* 3490 (isotype, AAU); D, McPherson 2830 (AAU); E, McPherson 3690 (AAU).

the description as the material is rather scarce; e.g., *Guillaumin & Baumann-Bodenheim 12151* (Z), and *Viro 1141* (P) have leaflets that are ovate-elliptic to elliptic, with sub-cordate base and

strongly acuminate apex, and measuring 6.5–8.2 × 2.6–2.9 cm in size. The material at hand has not allowed a comparison between the lower leaves and the leaves of the flowering and fruiting branches.

CONSERVATION STATUS. — Using the data available and applying the IUCN Red Data criteria (IUCN 2001), we assign *Storckiella pancheri* subsp. *acuta* a threat status of Low Risk (LR).

PARATYPES. — Nouvelle-Calédonie. *D'Alleizette Herb. s.n.*, Bourail, Aug. 1910, fl. (P); *Balansa 372*, rives de la Dumbéa, au-dessus de Koé, 21 Nov. 1868, bud (P); *Balansa 1384*, NE de Pt Louis, collines argilo-ferrugineuses, 21 Dec. 1869, fl. (BM, P); *Balansa 1385*, Koé, bords de la Kouvelé près de Koé, 29 Jan. 1869, juv. fr. (BM, G, P, Z); *Bamps 5719*, Plum-Prony, N de la Baie Ngo, 166°42'E, 22°18'S, 20 m, 9 Nov. 1977, fl. (G, K, NOU); *Bamps 5884*, vallée de l'Amoa, St Thomas, 165°14'E, 20°58'S, 50 m, 1 Dec. 1977, fl. (BM, NOU); *Baumann-Bodenheim 5870*, Mt Mou, 300 m, 10 Sept. 1951, fr. (Z); *Baumann-Bodenheim 14321*, Thio supérieure, 19 July 1951, fl. (P, Z); *Baumann-Bodenheim & Guillaumin 13312*, Pouéta, Kouré supérieure, 200 m, 10 May 1951, st. (P, Z); *Bernier 160*, plaine des Lacs, forêt Lucien et Perignon, c. 150 m, Aug. 1947, st. (P); *Blanchon 750*, plaine de Lacs, entre lac en 8 et laverie, maquis, sol de carapace latéritique, 13 Mar. 1964, juv. fr. (NOU, P); *Blanchon 1075*, *ibid.*, 10 Feb. 1964, bud (NOU, P); *Bourret 252*, s. loc., 1975, fl. (NOU); *Brinon 760*, Thy, main road opposite quarry, gallery forest, 180 m, 23 Aug. 1980, fl. (NOU); *Brinon 1054*, s. loc., fl. (NOU); *Brinon 1145*, s. loc., fr. (NOU); *Brousmitche s.n.*, Nouméa, Anse Vata, st. (P); *Buchholz 1337*, drainage system of tributaries of Pirogue river before Yaté drainage systems was reached, 200-250 m, 4 Nov. 1947, fl. (K); *Cabalion N. C. 207*, rivière Bleue, 21 Nov. 1977, fl. (NOU); *Cosson, De Courvello, Maituku & Widaou 479*, rivière Bleue, 30 May 1990, st. (NOU); *Cosson, Pinol & Maituku 819*, Thio Mission, 1/3 Mar. 1992, fl. (NOU); *Cosson & Maituku 894*, Thiébaghi, st. (NOU); *Cosson, Litaudon & Maituku 1401*, route Horaire, Thio, Naketi, st. (NOU); *Cribs 672*, Coulée Pouéta, 300 m, Jul. 1900, st. (P); *Cribs 1175*, Néaria, 100 m, May 1901, fl. (P); *Cribs 1513*, Prony, Carénage, Oct. 1903, bud (P); *Däniker 603*, SW foot of Mt Humboldt, Mine Balland, 12 Nov. 1924, bud (Z); *Deplanche 339*, s. loc., fl. (P); *Deplanche 560*, s. loc., 1863, fr. (P); *Dumontet, Blanchard & Maituku 255*, Goro, 91 m, 13/17 Jan. 2003, fl. fr. (NOU); *Favier 5197*, Prony, 25 Nov. 1974, fl. (NOU); *Franc 33*, ser A, July 1913, fl. (P, Z); *Franc 33*, Prony, Dec. 1914, fl. (G, P, Z); *Gérald 960*, Vallée de la Pourina, 4/12 Jan. 1993, fl. (NOU); *Green 1708*, near the Coulée river 17 km E of Nouméa, maquis on serpentine, c. 10 m, 29 Nov. 1963, fl. (K, P, Z); *Guillaumin 8369*, plaine des Lacs, Creek Pernod, 16 Nov. 1950, fl. (P, Z); *Guillaumin & Baumann-Bodenheim 6523*, vallée des Lacs, près du pont, serpentine scrub, gallery forest, 5 Oct. 1950, bud (Z); *Guillaumin & Baumann-Bodenheim 6534*, *ibid.*, 5 Oct. 1950, st. (Z); *Guillaumin & Baumann-Bodenheim 6728*, *ibid.*, 7 Oct. 1950, st. (P, Z); *Guillaumin &*

*Baumann-Bodenheim 11566*, riv. de Pirogues supérieure, 29 Mar. 1951, st. (Z); *Guillaumin & Baumann-Bodenheim 12151*, vallée de Voh supérieure, forêt hygrophile, 12 Apr. 1951, st. (P, Z); *Guillaumin & Baumann-Bodenheim 13312*, Pouéta, Kouré supérieure, 200 m, 10 May 1951, st. (P, Z); *Hartley 15024*, Nouméa-Yaté road, c. 25 km NE of Nouméa, c. 100 m, 23 Nov. 1979, fl. (NOU); *Hoogland & Jérémie 12714*, Plaine des Lacs, proche du pont du Creek Pernod, au bord de la rivière du lac, c. 160 m, 20 Nov. 1988, fl. (P); *Hürlimann 376*, baie des Pirogues, forêt mésophile, c. 70 m, 16 Dec. 1950, fl. (P, Z); *Hürlimann 1042*, Dumbéa, 120 m, 14 Mar. 1951, st. (P, Z); *Hürlimann 1505*, rivière Bleue, maquis des terrains serpentineux dans la plaine au sud de la riv. Bleue, c. 130 m, 12 June 1951, st. (P, Z); *Lécard 165*, forêts des hauts plateaux, fr. (P); *Le Rat 227*, Prony, 0-300 m, fl. (P); *Le Rat 371*, Monts Koghis, bud (P); *Le Rat 706*, s. loc., bud (P); *Le Rat 975*, Monts Koghis, 100 m, fl. (P); *Le Rat 1659*, Prony, 300 m, bud (P); *Le Rat 2274*, bord de la Counelé, Sept. 1904, fl. (P); *Le Rat 2307*, *ibid.*, Oct. 1904, fl. (P); *Lowry, Tronchet & D. & I. Létocart 6006*, lac de Yaté, 15.5 km E of turnoff to rivière Bleue Reserve on road to Yaté, 22°09'11"S, 166°50'02"E, 165 m, 13 Dec. 2002, fl. (NOU); *MacDaniels 2537*, plaine des Lacs, 14 Dec. 1949, fl. (P); *MacKee 3224*, 5 km S of rivière des Pirogues, 50-100 m, 15 Oct. 1955, bud (P); *MacKee 3445*, N Dumbéa Valley, 50-100 m, 14 Nov. 1955, fl. (P); *MacKee 4155*, plaine des Lacs near baie du Sud, 200 m, 25 Mar. 1956, fr. (P); *MacKee 6587*, about 10 km from Thio on Nouméa road, 30 m, 11 Sept. 1958, fl. (P); *MacKee 12054*, col d'Amieu, côte de la Foa, 250 m, 21 Jan. 1965, fr. (L, NOU, P); *MacKee 12722* (leg. Gay), col d'Amieu, 250 m, 10 Nov. 1964, fl. (NOU, P); *MacKee 14922*, pente SW du dôme de Tiébaghi, 300-500 m, 9 May 1966, fr. (AAU, NOU, P); *MacKee 15005*, Sarraméa, 19 May 1966, bud (NOU, P); *MacKee 16185*, pente SW, dôme Tiébaghi, 100-300 m, 26 Dec. 1966, fl. (NOU, P); *MacKee 17219*, Poindimié, forêt humide, 50 m, 4 Aug. 1967, fl. (AAU, B, CANB, E, K, L, MO, NOU, P); *MacKee 20907*, vallée de l'Amoa, Nov. 1969, fr. (AAU, K, L, NOU, P); *MacKee 21950*, Port Boisé, 19 May 1970, fr. (NOU, P); *MacKee 22840*, route de Yaté, vallée de la Lembi, 9 Nov. 1970, fl. (AAU, CANB, G, K, L, MO, NOU, NSW, P, WELT); *MacKee 23040*, vallée Boulari, 100 m, 13 Dec. 1970, fl. (NOU, P); *MacKee 28568*, vallée de la Poya, Ndokoa, 200 m, 25 Apr. 1974, bud (AAU, CANB, K, L, MO, NOU, NSW, P, WELT); *MacKee 29313*, Balabio, baie du Capitaine, 10-150 m, 17 Sept. 1974, st. (MO, NOU, P); *MacKee 29716*, plaine des Lacs, route de Carenage, 200 m, 29 Jan. 1975, fl., juv. fr. (AAU, K, L, MO, NOU, P); *MacKee 32357*, basse vallée de la rivière des Pirogues, 20 m, 2 Dec. 1976, fl. (AAU, L, NOU, P); *MacKee 34707* (leg. Sopéna), Pic Noir, hte Boghen, 500 m, 9 Feb. 1978, st. (MO, NOU, P); *MacKee 37753*, Poya, Jan. 1980, fl. (AAU, CANB, K, L, MO, NOU, P, PERTH); *MacKee 38044*, Touhou, Ponandou, 16 Apr.



FIG. 4. — *Storkiella* species of New Caledonia: **A**, *S. pancheri* Baill. subsp. *acuta* I.C.Nielsen, Labat & Munzinger, flowering branch; **B**, *S. pancheri* Baill. subsp. *pancheri*, flowering branch; **C-F**, *S. neocaledonica* I.C.Nielsen, Labat & Munzinger: **C**, habit; **D**, flowering branch; **E**, flowers; **F**, trunk. A, Labat *et al.* 3490 (type specimen); B, Munzinger *et* Labat 2598; C-F, Labat *et al.* 3524 (type specimen). Photos A, J.-N. Labat; B-F, J. Munzinger.

1980, fl. (AAU, CANB, K, L, MO, NOU, NSW, P, WELT); *MacKee 39102*, col d'Amos, 300 m, 19 May 1981, bud (AAU, BM, CANB, G, K, L, MO, NOU, NSW, P, WELT, Z); *MacKee 39150 (A)*, rivière du Cap, forêt galerie, alluvions serpentineuses, 7 June 1981, fl. (AAU); *MacKee 39150 (B)*, Voh, Katepahié, 300 m, 8 June 1981, fl. (NOU); *MacKee 39178*, Voh, Tiéta, 9 June 1981, bud, (AAU, NOU); *MacKee 39240* (leg. *Cherrier*), Téné, terrain serpentineux, 100 m, fl. (P); *MacKee 39244*, Tonghoué, reste de forêt, schistes, 24 June 1981, fl., juv. fr. (AAU); *MacKee 39244*, Tonghoué, 24 June 1981, fl. (NOU); *MacKee 39252* (leg. *Bégaud*), Mt Mou western base, 200 m, 24 June 1981, fl. (NOU, P); *MacKee 39369*, col d'Amos, versant Ouégoa, 300 m, 30 July 1981, fl. (NOU); *MacKee 40040*, vallée de la Ni, 100 m, 3 Dec. 1981, fl. (AAU, NOU); *MacKee 42908*, Yaté, reste de forêt, alluvions serpentineuses, 200 m, 2 Nov. 1985, fl. (AAU, K, MO, NOU, P, Z); *MacKee 42943*, Yaté, forêt humide, pente raide, rocheuse serpentineuse, 100 m, 1 Dec. 1985, fl. (AAU, K, MO, NOU, P); *McPherson 1690*, Thy river valley, c. 12 air-km. NE of Nouméa, gallery forest, 100 m, 19 June 1979, fl. (NOU, P); *McPherson 2128*, Nouméa-Yaté road, maquis about 5 km SW of Ouémarou, 23 Nov. 1979, fl. (NOU, P); *McPherson 2648*, Thio-Canala road, forested slopes, c. 3.5 km N of Thio, along old road to Mine Pauline, N of Dothio river, c. 100 m, 14 May 1980, fr. (NOU, P); *McPherson 2830*, Mt Do, c. 13 air-km NW of Bouloupari, forested slopes, 6 July 1980, fl. (AAU, NOU, P); *McPherson 3619*, maquis c. 5 km W of Madeleine on Nouméa-Yaté road, 22 Mar. 1981, fr. (AAU, NOU, P); *McPherson 5224*, lower reaches of Dumbéa valley, forest remnants, 27 Nov. 1982, fl. (AAU); *Morat 5765*, Tournée, plaine des Lacs, sur cuirasse, 21 Dec. 1977, fl. (NOU, P); *Munzinger & Carriconde 947*, Port Bouquet, rivière Koum, près du camp de base, à côté de la confluence entre la Néma et la Koum, 20 m, 22 Nov. 2001, fl. (MO, NOU, P); *Munzinger, D. & I. Létocart 2344*, Col de Mo, 22 Aug. 2004, fr. (NOU, P); *Pancher s.n.*, s. loc., 1879, fl. (P); *Pancher s.n.*, "commun autour de Mont Doré" (P, Z); *Pancher 6748*, "massifs aux pieds des montagnes", 1861, fr. (P); *Pancher 6794*, s. loc., 1862, fl. (P); *Pancher & Vieillard 795*, s. loc., fr. (P); *Petit 38*, s. loc., st. (P); *Phillips & Schmid 3150*, SE end of Grand Lac, 1 km SE of abandoned mining settlement, 210 m, fr. (P); *Rohrdorf 4*, between baie Ngo and Touaourou, 1903, fl. (Z); *Sarlin 169*, Dumbéa, Aug. 1949, fr. (P); *Sarlin 224*, Ponerihouen, fl. (P); *Schmid 1112*, Dumbéa, branche Nord, 30 Mar. 1966, fr. (NOU); *Schmid 4953*, Boghen, forêt galerie, Apr. 1974, bud (NOU, P); *Schmid 5194*, Prony, 25 Nov. 1974, fl. (NOU, P); *Sébert & Fournier 38*, s. loc., fr. bud (P); *Sévenet & Pusset 1420*, s. loc., 21 Dec. 1977, fl. (NOU); *Thiebaud s.n.*, s. loc. 1865, bud (P); *Thorne 28555*, route de Yaté, 36 km from Nouméa, 5 Nov. 1959, fl. (P, Z); *Veillon 7095*, Nakutakoin, versant SW du Pic Jacob, vers 250 m, 1 Aug. 1989, fr. (NOU); *Vieillard Herb. s.n.*, "arbre, Kanala etc." (P); s. loc. (Z);

*Vieillard Herb. s.n.*, "commun autour du Mt Dore", fl., fr. (P, BM, G); *Vieillard Herb. 399*, baie du Sud, fl. (P); *Vieillard Herb. 402*, "in silvis montium juxta Wagap", fl. (BM, P); *Vieillard Herb. 402*, Balade, fl. (P); *Virot 621*, au Sud du Grand Lac, plaine des Lacs, c. 230 m, 30 Mar. 1942, juv. fr. (P); *Virot 907*, haute Dumbéa, concession Werquin, 21. Nov. 1942, fl. (P); *Virot 1141*, base du Mt Mou, c. 200 m, 4 July 1943, st. (P); *Virot 1439*, route de Yaté, près au col des Dalmates, maquis serpentineux, c. 300 m, 12 Nov. 1944, fl. (P); *Webster 19197*, half-way between Yaté Barrage et Yaté Village, 50 m, woods on steep slopes of ultrabasic rock, along route horaire, 11 Dec. 1973, fl. (P); *White 2277*, rivière des Pirogues, 31 Oct. 1923, fl. (P).

### 3. *Storckiella australiensis* J.H. Ross & B. Hyland

Muelleria 5 (3): 215 (1983); Ross, Flora of Australia 12: 73-75 (1998). — Type: *B. Hyland 6357*, Australia, Queensland, Parish of Alexandra, Portion 62 (holo-, MEL; iso-, BRI, CANB, K, L, QRS).

DISTRIBUTION. — Endemic to north-eastern Queensland, Australia.

ECOLOGY. — According to ROSS & HYLAND (1983) this species is confined to a small area of extremely wet, lowland rain forest north-west and north-east of Daintree, north-east Queensland.

NOTE. — For description and further information on this species see J.H. ROSS (1998).

### 4. *Storckiella vitiensis* Seem.

Bonplandia 9: 363. t. 6 (1861); Fl. Vit. 68, t. 13 (1865); Smith, Fl. Vitiensis Nova 3: 99-100 (1985). — Type: *Seemann 133*, Fiji, Port Kinnaird, Ovalau (holo-, K; iso-, BM, K).

DISTRIBUTION. — Endemic to Fiji Islands where it has been recorded from Ovalau, Viti Levu, Kandavu and Vanua Levu.

ECOLOGY. — According to A.C. SMITH (1985) this species is found in usually dense forest at low altitudes up to about 300 m.

NOTE. — For further references, description and information see A.C. SMITH (1985).

## Acknowledgements

We thank Daniel, Irène, Christian, Bertrand and Susanna LÉTOCART for help in the field and assistance with identification of birds. The authorities of North and South Provinces provided permit to collect. The two reviewers, Drs P. LOWRY and F.J. BRETHER, made several good suggestions for improvement of the manuscript, Dr Benjamin ØLLGAARD (AAU) translated the diagnoses into Latin and Ms Kirsten TIND prepared the illustrations, an assistance that is most gratefully acknowledged.

## REFERENCES

- BAILLON H.E. 1869. — Note sur les *Storckiella*. *Adansonia* 9: 204-206.
- BAKER E.G. 1921. — Plants from New Caledonia, Polypetalae, Leguminosae. *J. Linn. Soc. Bot.* 45: 293-298.
- GUILLAUMIN A. 1911. — Contribution à la flore de la Nouvelle-Calédonie VIII. Plantes recueillies par M. et Mme Le Rat de 1900 à 1910 (suite), Légumineuses. *Bull. Mus. natl Hist. nat.* ser. 1, 17: 453-454.
- GUILLAUMIN A. 1936. — Matériaux pour la flore de la Nouvelle-Calédonie. XL. Révision des Légumineuses. *Bull. Soc. bot. France* 83: 294-311.
- GUILLAUMIN A. 1948. — *Flore analytique et synoptique de la Nouvelle-Calédonie : Phanérogames*. Office de la Recherche scientifique coloniale, Paris.
- IRWIN H.S. & BARNEY R.C. 1981. — Cassiæae: 97-106, in POLHILL R. & RAVEN P.H. (eds), *Advances in Legume Systematics* 1. Royal Botanic Gardens, Kew.
- ROSS J. H. 1998. — *Storckiella australiensis*, in ORCHARD A. E. & WILSON A. J. G. (eds), *Flora of Australia* 12. ABRIS, Canberra; CSIRO Publishing, Melbourne: 73-75.
- ROSS J.H. & HYLAND B.P.M. 1983. — *Storckiella australiensis* sp. nov. (Caesalpiniaceae) from Northern Queensland: a new generic record for Australia. *Muelleria* 5 (3): 215-217.
- SEEMANN B.C. 1861. — *Storckiella vitiensis* Seem. *Bonplandia* 9: 363, pl. 6.
- SMITH A.C. 1985. — *Flora Vitiensis Nova*, vol. 3. Pacific Tropical Botanic Garden, Lawai, Kauai, Hawaii.
- UICN 2001. — *Catégories et critères de l'UICN pour la liste rouge : Version 3.1*. Commission de la sauvegarde des espèces de l'UICN, Gland; Cambridge, Royaume-Uni.

*Submitted on 18 February 2005;  
accepted on 14 September 2005.*