

Vietsenia C. Hansen, a new genus of the *Melastomataceae* for Vietnam

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Summary : The new genus *Vietsenia* C. Hansen and the three new species *V. laxiflora* C. Hansen, *V. poilanei* C. Hansen and *V. rotundifolia* C. Hansen are described. The presentation includes key to the related genera, key to the species, map of distribution, illustrations of floral parts and photographs of type specimens.

Résumé : Le nouveau genre *Vietsenia* C. Hansen est établi et trois espèces nouvelles (*V. laxiflora* C. Hansen, *V. poilanei* C. Hansen et *V. rotundifolia* C. Hansen) sont décrites. Une clé permet de distinguer *Vietsenia* des genres voisins. Les espèces s'identifient facilement grâce à une clé, aux dessins des parties florales et aux photographies des échantillons d'herbier. L'aire des espèces est présentée.

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The new genus *Vietsenia* has been established on the basis of four unidentified sheets kept in Muséum National d'Histoire Naturelle in Paris. The name has been made from the geographical name Vietnam and the generic name *Driessenia*, its occurrence and its relationship thus being indicated.

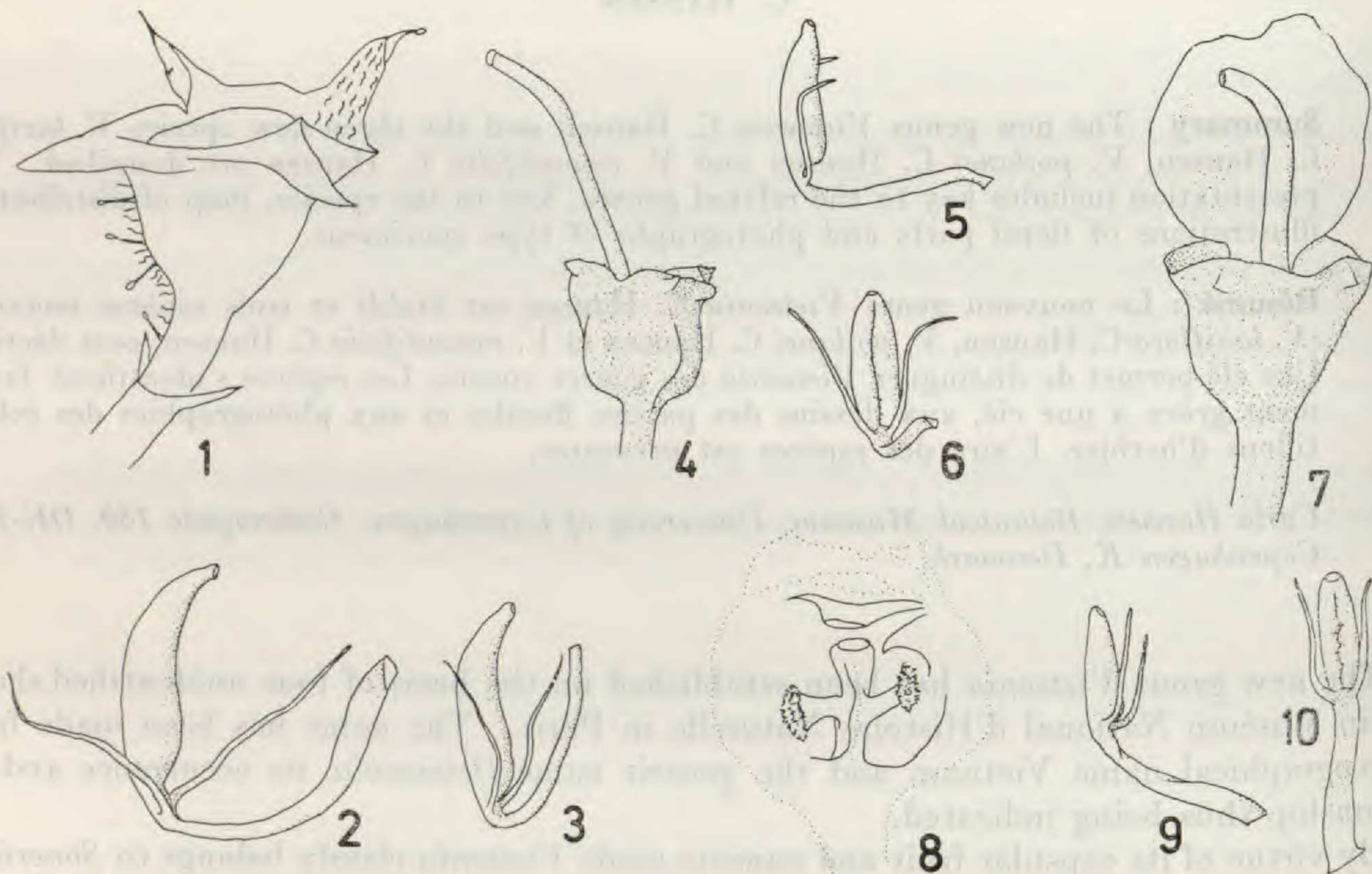
By virtue of its capsular fruit and cuneate seeds *Vietsenia* clearly belongs to *Sonerileae* s.l., which it resembles in all aspects. Because of its fruit in which, during or after dehiscence, the basal half of the hypanthium and the pedicel swell and persist, the genus seems to be related to *Driessenia*, *Campimia* and *Neodriessenia*, which commonly show that feature. Habitually it comes close to some species of *Driessenia*, which genus it also resembles by having two long, ventral, staminal appendages (Pl. 1). That, on the other hand, distinguishes it from *Campimia* and *Neodriessenia*. An additional difference from the latter is the absence of an indumentum of small, hyaline, yellow glands. *Vietsenia* has terminal inflorescence, a feature which it shares only with some *Driessenia* species. The three species in *Vietsenia* are distinct.

I have chosen to treat this part of the *Sonerileae* s.l. in the four genera *Vietsenia*, *Driessenia*, *Campimia* and *Neodriessenia*, because they can be safely distinguished as touched on above and as given in the following key.

KEY TO VIETSENIA, DRIESSENIA, CAMPIMIA AND NEODRIESSENIA

- | | |
|---|---|
| 1 a. Stamens with a dorsal ridge, tubercle or spur and 1 or 2 ventral appendages..... | 2 |
| b. Stamens with either dorsal or ventral appendages missing..... | 3 |

- 2 a. Ventral appendage 1, long and stout ; vegetative parts with minute, hyaline, yellow glands *Neodriessenia*
 b. Ventral appendages 2, half as long as anther or longer ; minute, hyaline, yellowish glands missing *Driessenia*
- 3 a. Ventral appendage missing, dorsal appendage a flattened spur *Campimia*
 b. Ventral appendages 2, filiform, about as long as anther, dorsal appendage missing *Vietsenia*



Pl. 1. — *Vietsenia*, parts of flowers and fruits, all ca. $\times 8$: 1-3, *V. laxiflora* (Pételot 7145), outline of hypanthium in flower, epipetalar and episeplar stamens ; 4-6, *V. poilanei* (Poilane 29399), hypanthium in flower and two stamens ; 7-10, *V. rotundifolia* (Clemens 3517), hypanthium in flower and petal, placentas in fruit and epipetalar and episeplar stamens.

VIETSENIA C. Hansen, *gen. nov.*

Inter Sonerileas (s.l.) ex affinitate Driesseniae, Campimiae et Neodriesseniae, sed staminibus cum duabus appendicibus ventralibus, filiformibus, antherae fere aequilongis, et sine appendice dorsali, differt.

Suffrutices. Folia longe petiolata, decussata, folia gemella forma similaria et magnitudine aequalia vel subaequalia, ovata ad latissime ovata, 6-16,5 \times 3-8 cm, quinquenervia. Ramificatio inflorescentiae in apice scorpioidea. Pedicellus 1-2 mm longus. Flos tetramerus. Hypanthium cyathiforme, 1,5-1,8 \times 1,4-1,8 mm, pariete tenui. Sepala persistentia. Stamina forma similaria et magnitudine aequalia vel subaequalia. Filamenta 1,5-4 mm longa ; antherae 1,4-2,9 mm longae.

TYPE SPECIES : *Vietsenia poilanei* C. Hansen.

or absent ; anther pockets about half-way to base ; placentas axile protruding into ovary cells on narrow stalks. Style 3.3-4.5 mm long, glabrous, stigma as wide as style. Fruit known only in *V. rotundifolia*.

KEY TO THE SPECIES

- 1 a. Flowers present 2
- b. Flowers absent 3
- 2 a. Inflorescence lax, few-flowered ; sepals ca. 1.5 mm long ; petals ca. 6 mm long ; anthers 2.5-2.9 mm long *V. laxiflora*
- b. Inflorescence dense, many-flowered ; sepals ca. 0.4 mm long ; petals 2.5-3 mm long ; anthers ca. 1.5 mm long 4
- 3 a. Stem and leaves clothed with 0.3-0.5 mm long, patent, gland-tipped hairs.. *V. laxiflora*
- b. Stem and leaves clothed with less than 0.1 mm long, minute, glandular hairs..... 4
- 4 a. Leaf apex very broadly rounded to slightly, very broadly bluntly acuminate ; upper leaf surface clothed with few, stout, short bristles apically or close to margin or with only minute, glandular hairs *V. rotundifolia*
- b. Leaf apex acuminate ; upper leaf surface clothed with ca. 1 mm long, wavy, gland-tipped hairs..... *V. poilanei*

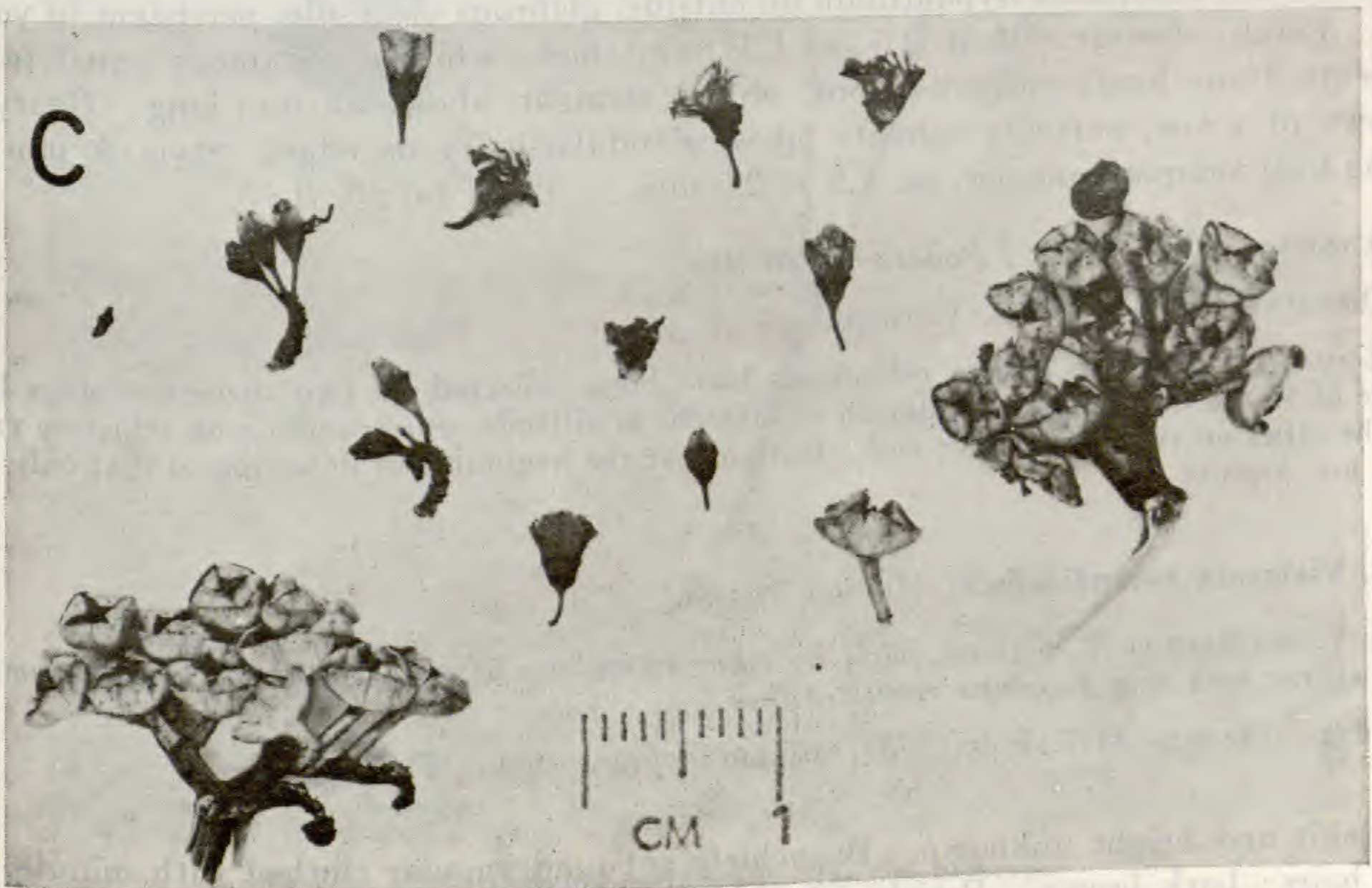
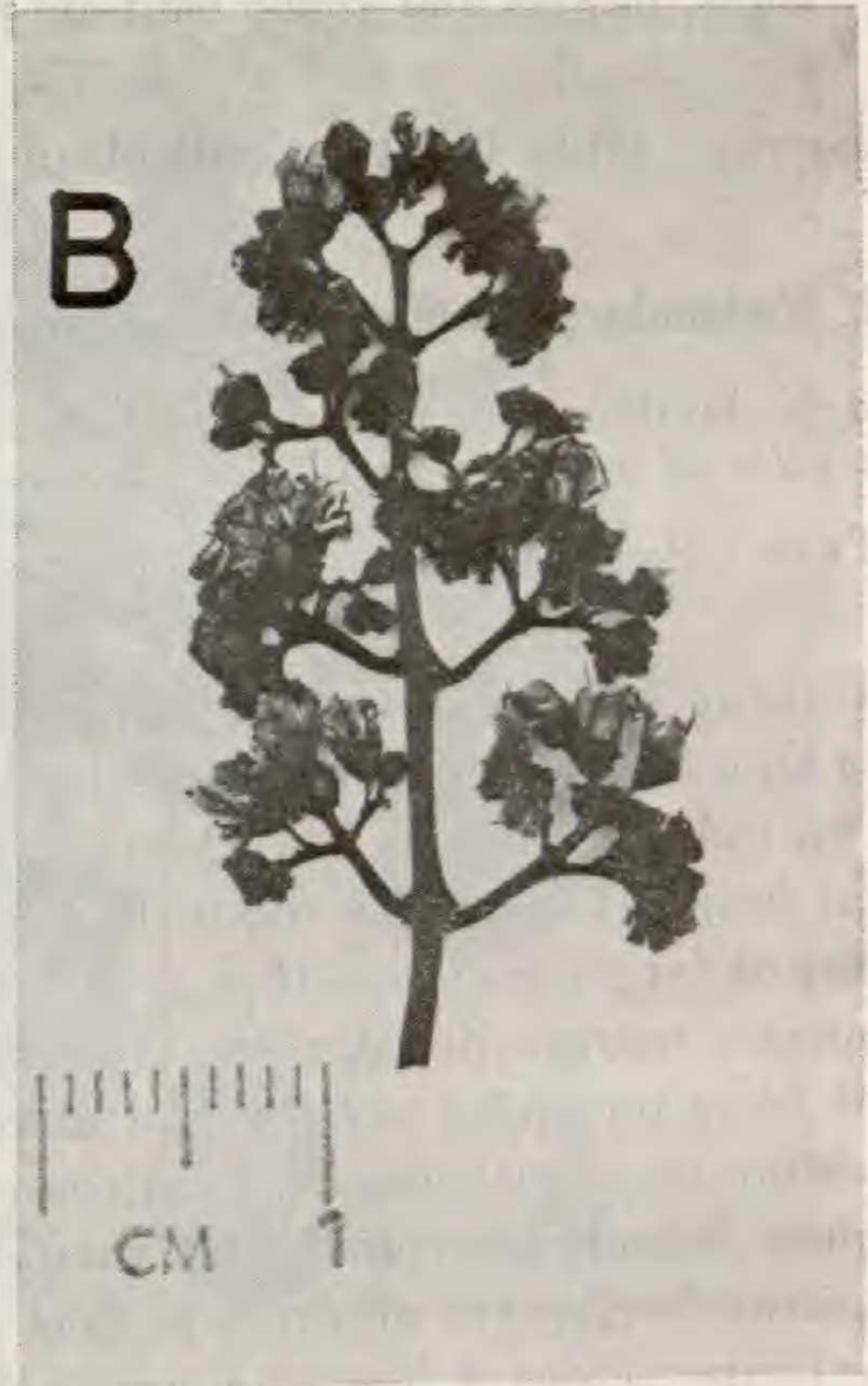
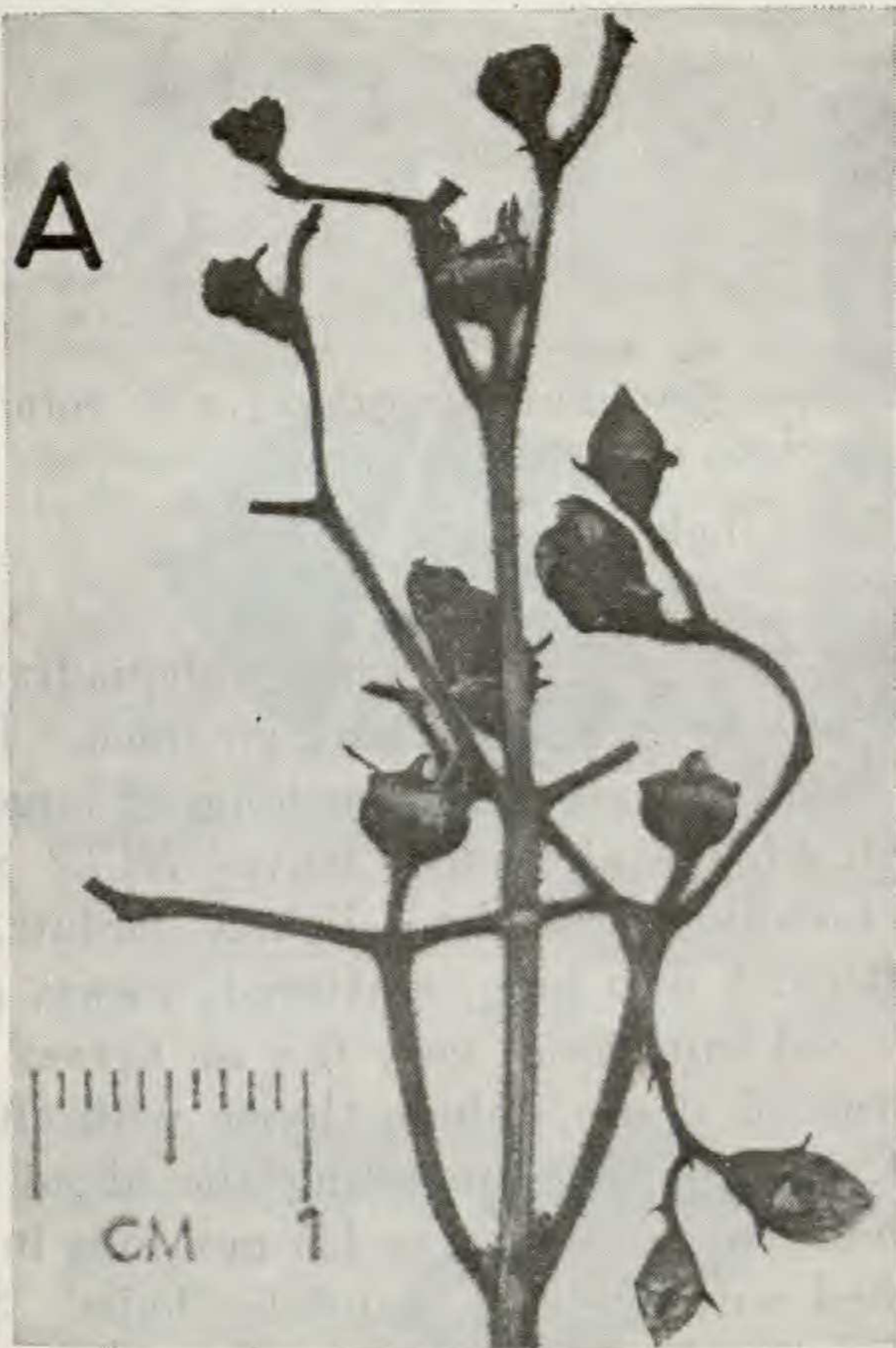
1. *Vietsenia laxiflora* C. Hansen, sp. nov.

A *V. poilanei* et *V. rotundifolia* pilis patentibus, ad apicem glandulosis, in caule, thyrso laxo pauciflorenti et partibus floralibus grandis differt.

TYPE : Pételot 7145, Tonkin, col de Léa (holo-, P).

Branched shrub, height unknown. Branchlets quadrangular, clothed with patent, pluri-seriate, gland-tipped 0.3-0.5 mm long hairs and patent, uni-seriate, about half as long, brown hairs, becoming glabrous with age ; bark light brown. Petioles clothed as branchlets ; petiole of smaller leaves 2-2.5 cm long, of larger leaves 3.5-6 cm long. Leaf-blade broadly ovate, blade of smaller leaves about 6 × 3 cm, of larger leaves about 11 × 6 cm ; base cordate, apex acuminate, margin entire to bluntly denticulate ; indumentum on both surfaces as on branchlets, but much sparser, on under surface mainly on nerves. Inflorescence a terminal, lax, few-flowered thyrses with ultimate branches distantly scorpioid, about 8 cm long including the 4 cm long peduncle ; bracts minute ; pedicel 1 mm in flower and 2 mm in young fruit. Hypanthium about 1.7 × 1.7 mm, with an indumentum as stem. Sepals connate into a rim, ca. 0.2 mm high at sinuses, ca. 1.5 mm high at lobes, which are attenuate and pointed into a glandular hair dorsally at apex, clothed as hypanthium on outside, with only uni-seriate hairs on inside ; persistent in very young fruit (mature fruit unknown). Petals very broadly ovate, about 6 × 4.5 mm, thin, colour unknown. Stamens somewhat unequal in size ; filaments 4 and 2.8 mm long in episeptal and epipetalar stamens respectively, anthers oblong to obovate, bending forward apically, 2.9 and 2.5 mm long in episeptal and epipetalar anthers respectively. Ovary rounded apically, without a crown, glabrous. Style 4.5 mm long. Mature fruit not known. — Pl. 1, 1-3 ; 3, A ; 4.

DISTRIBUTION (Pl. 2) : N. Vietnam.



Pl. 3. — *Vietsenia*, parts of inflorescences : A, *V. laxiflora* ; B, *V. poilanei* ; C, *V. rotundifolia*.

ECOLOGY : The label only tells that the specimen was collected in June at about 1200 m altitude. Buds, flowers and young fruit are present.

NOTES : Only the type collection is known.

2. Vietsenia poilanei C. Hansen, *sp. nov.*

A *V. laxiflora* thyrsos denso, multiflorenti, partibusque floralibus minoribus ; a *V. rotundifolia* autem pilis ad apicem glandulosis foliorum pagina superiore, differt.

TYPE : *Poilane 29399*, Poste 6 pro : du Quang Nam (holo-, P).

Unbranched to branched shrub less than 1 m high. Branchlets subquadrangular with a thin cover of minute, glandular hairs especially when young ; bark greenish. Petiole with an indumentum as branchlets ; petiole of smaller leaves 1-2.5 cm long, of larger 1.6-7.5 cm long. Leaf blade ovate to broadly ovate ; blade of smaller leaves 7-13.2 × 4.5-5.8 cm, of larger leaves 7-16.5 × 5-7 cm, base broadly rounded to slightly cordate, apex acuminate, margin denticulate ; indumentum of ca. 1 mm long, scattered, wavy, gland-tipped hairs on upper surface and along margin and sometimes very few on nerves below in addition to minute glands. Inflorescence a terminal, dense, oblong thyrsus with ultimate branches densely scorpioid and many-flowered, 3-8 cm long including the about 1 cm long peduncle ; bracts minute ; pedicel about 1 mm long in flower, to 1.5 mm long in fruit. Hypanthium about 1.5 × 1.4 mm, thinly clothed with minute, glandular hairs. Sepals hardly connate, very broadly rounded, about 0.4 mm long and twice as wide, conically thickened and clothed as hypanthium on outside, glabrous on inside, persistent in younger fruit. Petals obovate, about 2.5 × 1.4 mm, thick, whitish. Stamens equal in size ; filaments 2 mm long ; anthers oblong, almost straight, about 1.5 mm long. Ovary with a crown of 4 low, partially connate lobes, glandular-hairy on edge. Style 4 mm long. Young fruit subquadrangular, ca. 1.5 × 2.5 mm. — Pl. 1, 4-6 ; 3, B ; 5.

ADDITIONAL SPECIMEN : *Poilane 29426* (P).

DISTRIBUTION (Pl. 2) : S. Vietnam.

ECOLOGY : The two known collections have been collected on two successive days by the middle of March on the same mountain at 500-600 m altitude, one specimen on schistose granitic soil, the other on very rich clayey soil. Both are at the beginning of flowering so that only young fruits are present.

3. Vietsenia rotundifolia C. Hansen, *sp. nov.*

A *V. laxiflora* et *V. poilanei* foliis latissime rotundatis usque ad latissime obtuse acuminatis, supra sparse setis sine glandulis vestitis differt.

TYPE : *Clemens 3517*, Indo-China, Annam Tourane (holo-, P).

Habit and height unknown. Branchlets subquadrangular clothed with minute, glandular hairs ; bark brown. Petiole 4.5 cm long, clothed as branchlets. Leaf-blade very broadly ovate, 9 × 8 cm ; base probably cordate, apex very broadly rounded to slightly



Pl. 4. — *Vietsenia laxiflora* C. Hansen, holotype.



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INSTITUT DES RECHERCHES
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POILANE
29399

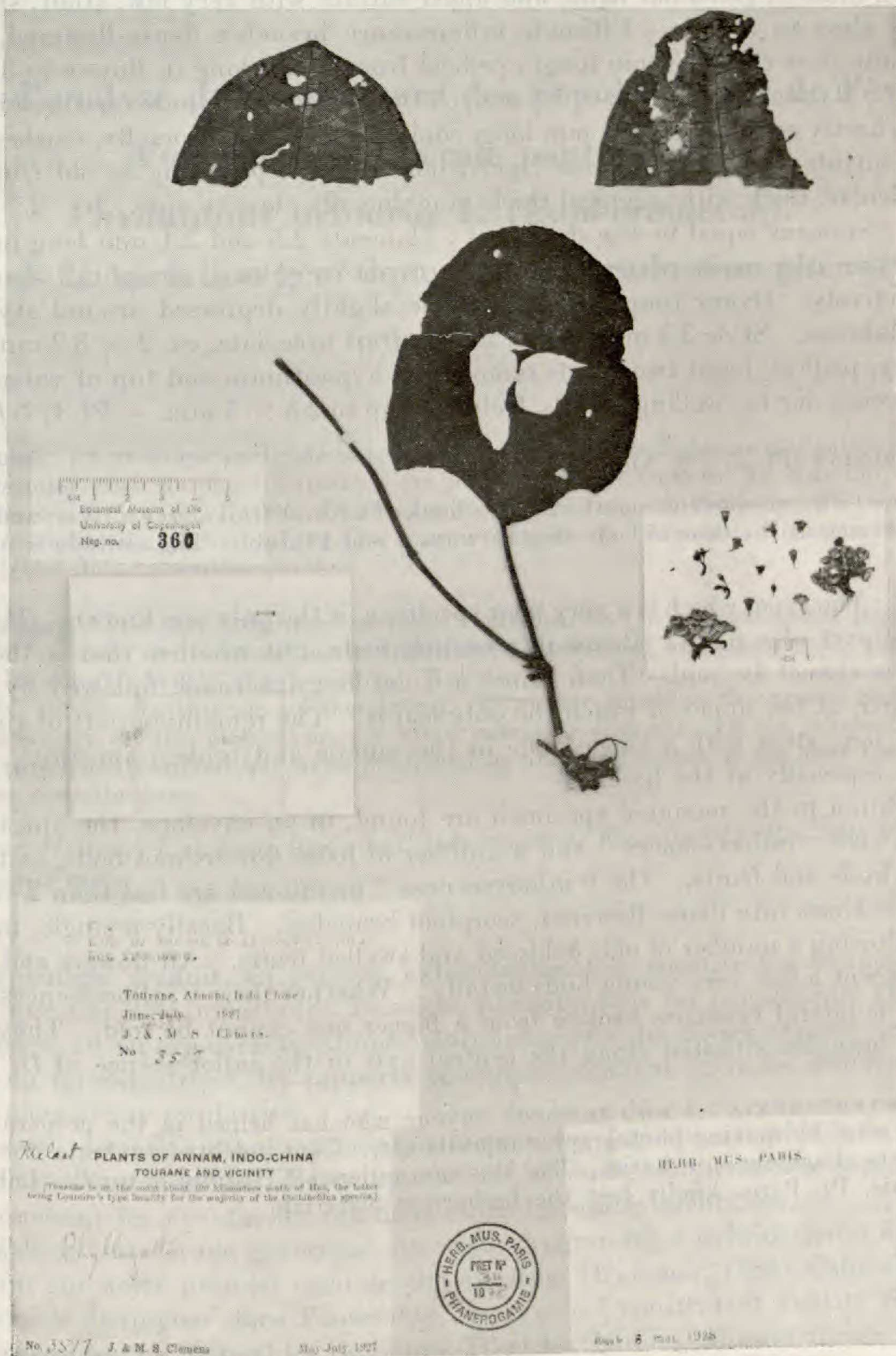
HERB. MUS. PARIS

HERB. MUS. PARIS

Plante de moins de 1 m. sous grande fait
le climat et elle est bien pale.
Cultures: Port C. pro: du Quang Nam
le 19-3-39, sous grande et forte sa
cote N. N. Le dessous de la feuille est pe
... ..

M. Eug. POILANE

Pl. 5. — *Vietsenia poilanei* C. Hansen, holotype.



Pl. 6. — *Vietsenia rotundifolia* C. Hansen, holotype.

very broadly bluntly acuminate, margin bluntly denticulate; both surfaces clothed with very sparse, minute, glandular hairs, and upper surface with very few, stout, short bristles apically or close to margin. Ultimate inflorescence branches dense-flowered, scorpioid; bracts minute (less than 0.3 mm long); pedicel from 2 mm long in flower to 3.5 mm long in old fruit. Hypanthium ca. 1.8×1.8 mm, clothed as stem. Sepals very broadly rounded, only very shortly connate, ca. 0.4 mm long, conically thickened dorsally, clothed as hypanthium on outside, glabrous on inside; persistent in fruit, perishing as old fruits develop. Petals orbicular, thick with a conical thickening dorsally close to apex, 3×2.7 mm, colour unknown. Stamens equal in size or almost; filaments 2.5 and 2.1 mm long in episeptal and epipetalar stamens respectively; anthers ovate to oblong, straight, 1.5 and 1.4 mm long respectively. Ovary rounded apically and slightly depressed around style, without a crown, glabrous. Style 3.3 mm long. Mature fruit urceolate, ca. 2×3.2 mm, dehiscing loculicidally, pedicel, basal two thirds remnant of hypanthium and top of valves enlarging after dehiscence due to swelling of cells, fruit then up to 2.5×4 mm. — Pl. 1, 7-10; 3, C; 6.

DISTRIBUTION (Pl. 2) : S. Vietnam.

ECOLOGY : The specimen was gathered on a bank of a forest trail above a river, and had almost finished flowering at the time of collecting between 4 and 13 July. The altitude is not recorded.

NOTES : The type, which is a very poor specimen, is the only one known. It is an about 17 cm long part of a plant. Below is a rooting node, but whether that is the true base of the plant cannot be said. Then comes a 3 cm long internode followed by two nodes close together, at the upper of which the only leaf is. The remaining part of the specimen is a 12 cm long stem with a single node in the middle and broken apically. The leaf is incomplete especially at the base.

In addition to the mounted specimen are found, in an envelope, the apical halves of two leaves, two "inflorescences" and a number of loose flowers and buds, and fragments of flowers, buds and fruits. The "inflorescences" mentioned are less than 2 cm long and forked a few times into dense-flowered, scorpioid branches. Basally a single, mature fruit remains following a number of old, dehisced and swelled fruits. All flowers and buds have fallen off except a few very young buds distally. Whether these "inflorescences" are complete ones or lateral branches broken from a bigger one cannot be told. They resemble the lateral branches situated along the central axis in the inflorescence of *D. poilanei*.

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