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А.Б. Доуэльд **A.B. Doweld**

A NOTE ON THE GENUS *PSEUDODRIMYS* (WINTERACEAE)

О РОДЕ *PSEUDODRIMYS* (WINTERACEAE)

Summary. New data on the morphology and anatomy of the fruits and seeds argues for exclusion of the aberrant (incertae sedis) species *Tasmannia purpurascens* (Vickery) A.C. Sm. (=*Drimys purpurascens* Vickery) from the genus *Tasmannia* R. Br. ex DC. (Winteraceae Lindl.). The species is transferred into the genus *Pseudodrimys* Doweld.

Key words: flowering plants, systematics, nomenclature, seed morphology, *Drimys*, *Tasmannia*, *Pseudodrimys*, Winteraceae.

Аннотация. На основании дополнительных исследований морфологии плодов и семян вид *Tasmannia purpurascens* (Vickery) A.C. Sm. (=*Drimys purpurascens* Vickery) исключен из состава рода *Tasmannia* R. Br. ex DC., в котором он рассматривался ранее как incertae sedis, и перенесен в род *Pseudodrimys* Doweld.

Ключевые слова: цветковые растения, систематика, номенклатура, морфология семян, *Drimys*, *Tasmannia*, *Pseudodrimys*, Winteraceae.

The monotypic genus *Pseudodrimys* Doweld (Winteraceae Lindl.) has been recently established to accommodate the anomalous species, *Drimys stipitata* Vickery, revealing close relationships to the genus *Pseudowintera* J. Dandy (Doweld, 2000). The close relationships were supported in particular by its similar distinctive seed-coat anatomy and morphology (granular seed cuticular sculpturing) in contrast to the genus *Tasmannia*, which is characterized by sessile uveta[1] and smooth seeds lacking of cuticular sculpturing.

However, in the re-circumscribed genus *Tasmannia* R. Br. ex DC. sensu Doweld (2000), one species, *T. purpurascens* (Vickery) A.C. Sm. (=*Drimys purpurascens* Vickery), occupies a somewhat isolated position, differing in having stipitate carpels (not sessile as in other species of *Tasmannia* sensu Doweld), pulpous uveolae, and two concrescent sepals, attached medianally (Vink, 1970). At the time of the taxonomic revision of *Tasmannia*, there were no seed materials, which are critical for resolving the taxonomic relationships, and the species was maintained in *Tasmannia* as incertae sedis.

With the obtaining of mature seeds and fruits of *T. purpurascens* (R. Schodde 3212 collected from East Barrington Tops, New South Wales, Australia, 3 II 1963, CANB), I managed to check the main features of the seeds and fruits. The fruits of the species (fig. 1) are polymerous uveta, consisting of 3–5 stipitate uveolae with a parenchymatous pericarp (fig. 2). The surface of the uveolae is smooth (fig. 3), without any cuticular sculpturing. There are numerous seeds (more than 15) per uveola, compactly packed within the carpel in two rows and revealing only small ridges on the whole surface. The seed

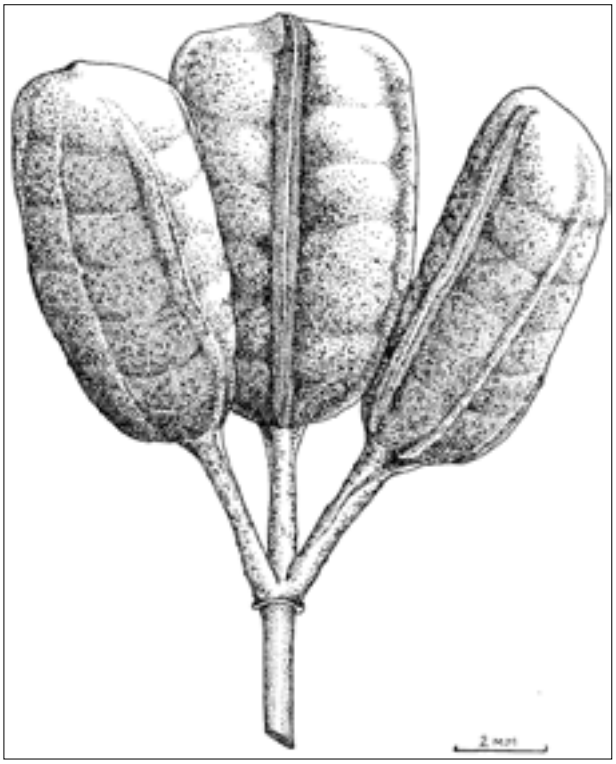

Fig. 1. Polymerous uvetum of *Pseudodrimys purpurascens* (Vickery) Doweld.

[1]Carpological terminology after Doweld and Sorokina (1997).

Национальный институт карпологии (Гертнеровский Институт), ул. Коненкова, д. 21; Москва, Россия, e-mail: nicar-sekretariat@yandex.ru

National Institute of Carpology (Gaertnerian Institution), 21 Konenkowa str.; Moscow, Russia

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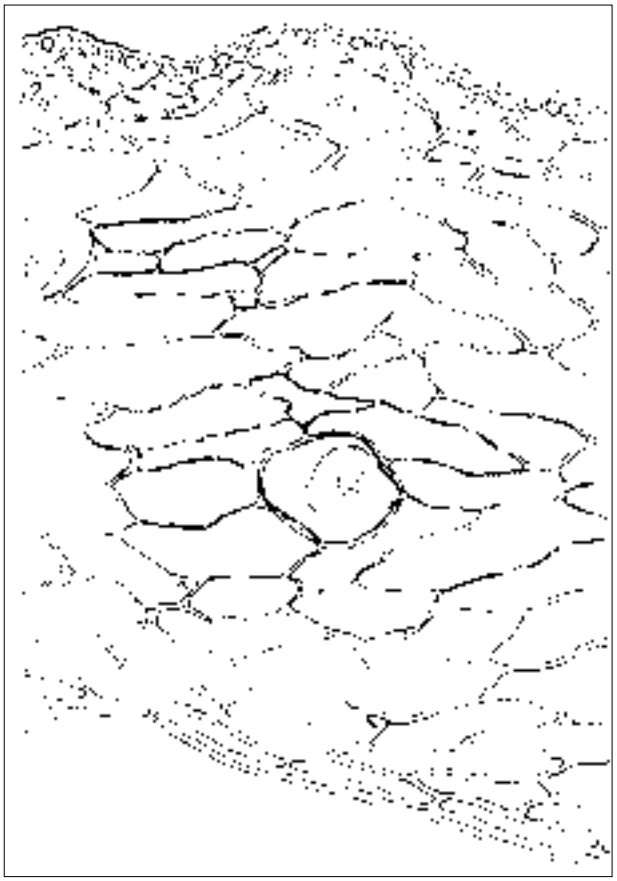

Fig. 2. Pericarp of *Pseudodrimys purpurascens* (Vickery) Doweld, × 40.

(fig. 4) is planate, obliquely reniform, with hilum and micropyle opposite to each other, 0.8–1.2 cm long, 0.4–0.6 cm wide, 0.4–0.5 cm thick; black. The seed sculpturing (fig. 5) is papillate with a pronounced granular cuticular sculpturing; the seed coat is exotestal (fig. 6).

The discovery of the distinctive type of granular cuticular sculpturing, typical for *Pseudodrimys*, *Pseudowintera*, *Bubbia* and *Zygogynum*, allows with certainty the exclusion of the species from the genus

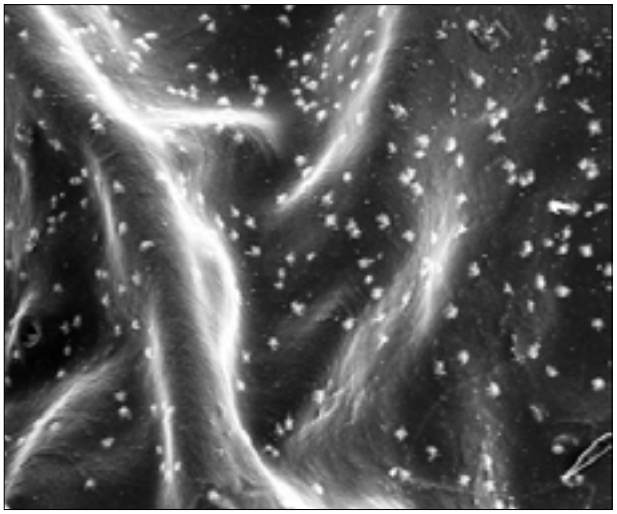

Fig. 3. The outer surface of the uveola of *Pseudodrimys purpurascens* (Vickery) Doweld, × 250.

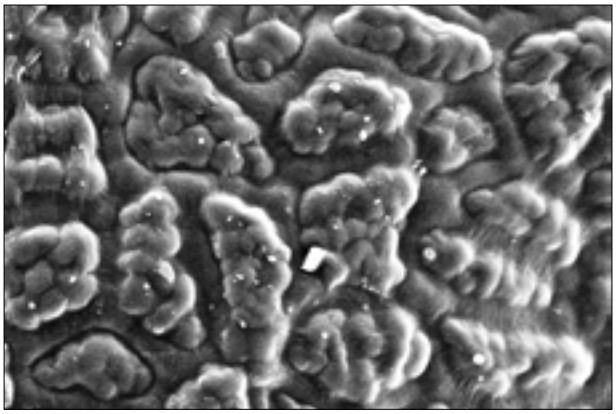

Fig. 4. The general view of the seed of *Pseudodrimys purpurascens* (Vickery) Doweld, × 30.

Fig. 5. The papillate seed sculpturing with granular cuticular sculpturing of *Pseudodrimys purpurascens* (Vickery) Doweld, × 1000.

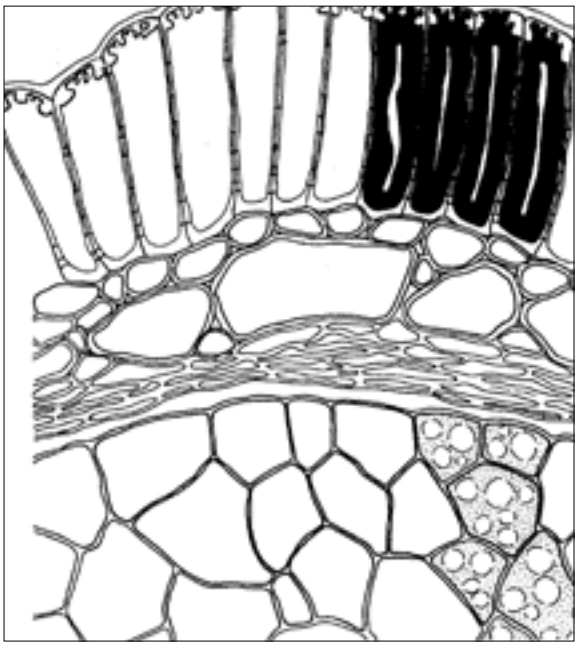

Fig. 6. The cross-section of the spermoderm showing sclerified exotesta of *Pseudodrimys purpurascens* (Vickery) Doweld, × 40.

Tasmannia, which is characterized by smooth seeds with no cuticular sculpturing, and its placement in *Pseudodrimys*. This finds additional support in the similar morphology of the fruits (stipitate polymerous uveta) and floral construction (Vink, 1970). The necessary formal combination is validated below.

Pseudodrimys Doweld, 2000, Novit. Syst. Pl. Vasc. [Новости сист. высш. раст.] 32 : 38.

T y p e: *P. stipitata* (Vickery) Doweld.

2 species: *P. stipitata*, *P. purpurascens* (Vickery) Doweld.

Pseudodrimys purpurascens (Vickery) Doweld comb. nov. – *Drimys purpurascens* Vickery, 1937, Proc. Linn. Soc. New South Wales, 62, 3–4 : 78. – *Tasmannia purpurascens* (Vickery) A.C. Sm. 1969, Journ. Arnold Arbor. 18, 3 : 287.

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