

A note on *Lepidium strictum* (S. Watson) Rattan (Brassicaceae) in Victoria, Australia.

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Abstract

Lepidium strictum (S. Watson) Rattan is shown to be the correct name for the species to which the name *L. pubescens* Desv. has been misapplied by Australian authors, following Thellung (1906).

Introduction

In his paper "The South American species of *Lepidium*" (1945), Hitchcock showed that *L. strictum* (S. Watson) Rattan differs diagnostically from *L. pubescens* Desv. in having relatively large nectary glands c. 0.5 mm long and prominently reticulate-veined siliculae 2.5–3 mm long, and thus Thellung (1906) erred in reducing the former species to synonymy with *L. pubescens*.

Australian records of *L. pubescens* are referable to *L. strictum*. All relevant collections in MEL match Hitchcock's description and figure of the latter species (Hitchcock 1945), as do the descriptions and figures of *L. pubescens* in Hewson (1982) and Entwisle (1996).

Taxonomy

Lepidium strictum (S. Watson) Rattan, *Anal. Key West Coast bot.* **25** 2nd edn (1888). Type: near Placerville [California, United States], Rattan (holotype GH *n.v.*, *fide* Hitchcock, *Madroño* **3**: 272 (1936)). *Lepidium oxycarpum* Torr. & Gray var. (?) *strictum* S. Watson, *Bot. California* **1**: 46 (1876).

Lepidium pubescens auct. non Desv., *J. Bot.* (Desvaux) **3**: 165, 180 (1814); Thellung, *Mitt. Bot. Mus. Univ. Zürich* **28**: 247 (1906); Hitchcock, *Madroño* **3**: 272 (1936); Willis, *Hand. Pl. Victoria* **2**: 175 (1973); Hewson, *Brunonia* **4**: 276 (1982); Entwisle, *Fl. Victoria* **3**: 420 (1996).

Lepidium reticulatum Howell, *Fl. N.W. Amer.* **i**: 64 (1897), non Thellung, *Mitt. Bot. Mus. Univ. Zürich* **28**: 253 (1906) = *Lepidium oblongum* Small.

Thellung (1906) lists a number of other misapplied or synonymous names but only one of these is relevant in an Australian context; the illustration cited in Willis (1973) for *L. pubescens*: Bettfreund, *Flor. Argent.* **2**: t. 78 (1900), is referred by Thellung to *L. bonariense* L.

Discussion

The only collection of *L. pubescens* seen by Thellung was Desvaux's type specimen from Peru. Regarding *L. pubescens*, Hitchcock (1945) states "It seems remarkable that the identity of this species has remained uncertain so long. The large, pubescent-margined silicles and sharply toothed leaves are to be matched in no other American species." He adds: "The material which Thellung and I called *L. pubescens* (= *L. strictum*) differs among other ways in having very prominently reticulate and much smaller fruits, longer glands, persistent sepals and different leaves."

In Australia, *L. strictum* is a rare weed of urban areas, confined to Victoria (Entwisle 1996). Although the type is from California, Hitchcock (1945) states "The species

appears to be a rather recent introduction to North America as it is found chiefly near habitations." Rollins (1993) describes it as a sporadic species, mostly in towns and cities, occurring in Utah, California and Oregon. It is thus probable that *L. strictum* is native only to Chile, where it occurs between latitudes 27° and 34°S, mainly around Valparaíso and Santiago, with one northern collection from the coastal town of Caldera in Atacama province (Hitchcock 1945). It is interesting to speculate as to whether the species was introduced directly into Australia from Chile or secondarily via California. The transitory appearance at Tenterfield, N.S.W. of *L. oblongum* Small (California to Arkansas and south to Mexico and Guatemala) appears to support the latter possibility (see Hewson, 1982). The three other American species recorded for Australia shed no light on the problem as *L. bonariense* L. (SE South America), *L. densiflorum* Schrad. (North America) and *L. virginicum* L. (North and South America) are widespread and successful weeds, now established outside their original ranges in the Americas and adventive in Europe, Australia and New Zealand (Garnock-Jones 1988; Hernández Bermejo & Clemente 1993; Hewson 1982; Hitchcock 1936; Rollins 1993; Ryves 1977).

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