

# A NEW COMBINATION IN *DRYANDRA* (PROTEACEAE)

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## ABSTRACT

The new combination *Dryandra meganotia* subsp. *recurvistylis* (K.R.Thiele) A.S.George, based on *Banksia recurvistylis* K.R.Thiele, is provided.

## INTRODUCTION

Mast and Thiele (2007) published a paper combining *Dryandra* with *Banksia*, with a further paper later that year covering names that were overlooked in the first paper (Thiele & Mast 2007). The transfer was based on phylogenetic analyses of molecular data (Mast *et al.* 2005). The Australian herbaria quickly adopted the change for the Australian Plant Census, but both the transfer and its acceptance have been met with concern and resistance from many users of plant names (see for instance Cavanagh 2008a, 2008b, Barrow 2009, Dixon 2011). Indeed, the website for Australia's Virtual Herbarium ([http://chah.gov.au/avh/public\\_query\\_help.jsp](http://chah.gov.au/avh/public_query_help.jsp), accessed 20 May 2012) states that 'some herbaria still recognise the genus *Dryandra*, while in other herbaria *Dryandra* is merged with *Banksia*.' The Australian Native Plants Society also continues to recognise *Dryandra* (<http://anpsa.org.au/dryand1.html>, accessed 20 May 2012).

The merger ran counter to conclusions reached in my research of over 50 years in the field, in the herbarium, in horticulture and in the literature and I have prepared a paper arguing against it (George in press). Morphologically the two genera are readily distinguished and recognisable, although I have deliberated whether certain small groups within each genus should themselves be recognised at generic rank, in particular subg. *Isostylis* of *Banksia* and subg. *Hemiclidia* and subg. *Diplophragma* of *Dryandra*.

The *International Code of Botanical Nomenclature* (ICBN, McNeill *et al.* 2006) sets out the criteria for valid publication of scientific plant names but gives no further direction on how to choose a name when there is more than one valid name for a taxon. The choice is taxonomic, not nomenclatural, so it depends on the user's preference. There is no obligation to follow a change simply because it is the latest published or because certain institutions have adopted it.

Likewise, there is no mandatory requirement to follow the Australian Plant Census, co-ordinated by the major Australian herbaria. All species except one of *Dryandra* now have valid names within both *Banksia* and *Dryandra*, hence users can choose which name to use. The exception is the recently described *Banksia recurvistylis* K.R.Thiele (Thiele 2009), for which there is currently no combination in *Dryandra*. I present here a new combination for this taxon as a subspecies of *Dryandra meganotia*.

Because the morphological differences between this taxon and its closest relative, *Dryandra meganotia* A.S.George, are of similar weight to those that I adopted within other species such as *Dryandra armata*, *D. fraseri* and *D. kippistiana* (George 1996 p. 314), and because this taxon is geographically disjunct from typical *D. meganotia*, I consider that subspecific rank within that species is appropriate. In making new combinations of *Dryandra* in

*Banksia*, Mast and Thiele (2007) accepted infraspecific taxa in the above three species based on these criteria.

Subspecies *recurvistylis* differs from typical *D. meganotia* in its taller, non-lignotuberos habit, longer leaves and larger flowers. The distinctions tabulated by Thiele (2009 p. 281) are less clear-cut when specimens of *D. meganotia* collected since my accounts (George 1996, 1999) are taken into account. These show the taxon to be more varied than previously thought, in habit and dimensions of leaves and flowers. *Dryandra meganotia* subsp. *meganotia* can have leaves up to 8 cm long and 30 mm wide, with up to 12 lobes each side; its perianth may be up to 25 mm long and its pistil up to 37 mm long. Field measurements made at two populations of *B. recurvistylis* (the localities of F. Hort 3182, F. Hort 2143) show that the perianth may be as short as 29 mm and the pistil as short as 38 mm.

**Table 1.** Main morphological differences between *Dryandra meganotia* subsp. *meganotia* and subsp. *recurvistylis*.

Character	subsp. <i>meganotia</i>	subsp. <i>recurvistylis</i>
Lignotuber	present	absent
Leaves	3–8 cm long 6–12 lobes each side	8–11 cm long 10–16 lobes each side
Perianth	22–25 mm long	29–38 mm long
Pistil	26–37 mm long	38–55 mm long



*Dryandra meganotia* subsp.  
*recurvistylis* (K.R.Thiele)  
A.S.George, **comb. et stat. nov.**

Basionym: *Banksia recurvistylis*  
K.R.Thiele, *Nuytsia* 19: 278 (2009)

Type: 'Wandering', Western  
Australia, 10 Nov. 2008, F.Hort  
3369 (holotype: PERTH 07702604;  
isotypes: CANB, K).

Also referred to as *Banksia* sp.  
Wandering (F. & J. Hort 3181),  
Western Australian Herbarium,  
in *FloraBase*, [http://www.  
florabase.dec.wa.gov.au](http://www.florabase.dec.wa.gov.au). The type  
locality is more than 40 km  
NNW of Wandering.

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