

## Homonyms in the Prodomi of Thunberg and Burman

by

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I was asked by the Division of Botany, Pretoria, to give an opinion concerning the status of the name *Cestrum venenatum* used by Thunberg in his *Prodromus* (1794), the question being whether this was intended to be the name of a new species, or whether Thunberg was simply adopting the already existing name *C. venenatum* Burm. f. (1768). The two works concerned are Thunberg's *Prodromus Plantarum Capensium* (1794, 1800) and N. L. Burman's *Florae Capensis Prodromus* appended to his *Flora Indica* (1768). Investigation of these showed that there are a number of cases similar to that of *Cestrum venenatum*, and I therefore thought it advisable, before forming an opinion, to carry out a comparative analysis of all the specific names published in the two *Prodromi*. Following are the results.

Thunberg dedicated his *Prodromus* to N. L. Burman but this is apparently a mark of appreciation of and gratitude for help and encouragement given by Burman, *not* a reference to Burman's own published work on the Cape flora. In fact Thunberg nowhere in his *Prodromus* makes any direct reference to Burman's *Prodromus*, and the only mention of N. L. Burman in the text is on p. 108 where he is cited under *Heliophila* in connexion with a description of that genus published in a Swedish journal. The other references to "Burm." given by Thunberg (e.g. on pp. 97, 98) are to the pre-Linnaean work of J. Burman, the elder. On the other hand, Thunberg throughout his *Prodromus* cites various Linnaean works, with which he was obviously familiar, and also makes occasional references to post-Linnaean publications by Bergius, L'Héritier, Sparrman, Cavanilles, Smith, Jacquin, Delaroché, Houttuyn and Acharius (lichens).

N. L. Burman in his *Prodromus* published about 260 legitimately named new species from the Cape, usually providing a description of his own but sometimes citing an earlier one. It is noteworthy that only 22 of the names listed by Thunberg correspond (in form, at least) with new specific names published by Burman in his *Prodromus*. They can conveniently be listed as follows, each with the Thunberg page-number and then the Burman page-number in parentheses:

<i>Gladiolus junceus</i> 8 (2)	<i>Schoenus spicatus</i> 16 (3)
<i>Echium spicatum</i> 33 (4)	<i>Echium hispidum</i> 33 (5)
<i>Erica hispida</i> 70 (11)	<i>Cestrum venenatum</i> 36 (5)
<i>Ononis prostrata</i> 129 (21)	<i>Vitis capensis</i> 44 (7)
<i>Othonna linifolia</i> 167 (29)	<i>Limeum aethiopicum</i> 68 (11)
<i>Satyrium cornutum</i> 5 (30)	<i>Reseda capensis</i> 85 (13)
<i>Polygala stipulacea</i> 121 (20)	<i>Orobanche capensis</i> 97 (17)
<i>Lobelia volubilis</i> 39 (29)	<i>Geranium ovale</i> 113 (19)
<i>Aloe arachnoides</i> 61 (10, "arachnoidea")	<i>Ononis strigosa</i> 130 (21)
	<i>Phaseolus capensis</i> 130 (21)
	<i>Psoralea linearis</i> 135 (22)
	<i>Gnaphalium spatulatum</i> 151 (25,
	"spatulatum")
	<i>Osteospermum incanum</i> 166 (29)

Of these, *Gladiolus junceus* is *G. junceus* L. f. (1781), non Burm. f.; *Echium spicatum* is *E. spicatum* L. f. (1781), non Burm. f.; *Erica hispida* is *E. hispida* Thunb. (1785), non Burm. f.; *Ononis prostrata* is *O. prostrata* (L.) L. (1771), non Burm. f.; *Othonna linifolia* is *O. linifolia* L. f. (1781), non Burm. f. *Satyrium cornutum* is *S. cornutum* (L.) Thunb., a new combination based on *Orchis cornuta* L., which has no connexion with *S. cornutum* Burm. f. *Polygala stipulacea* is evidently taken up from Linnaeus, Mant. Pl. Alt. 260 (1771), where Linnaeus makes an interpretation of *P. stipulacea* Burm. f. Similarly *Lobelia volubilis* is taken up from Linnaeus fil., Suppl. Pl. 396 (1781), where an interpretation is made of *L. volubilis* Burm. f. *Aloe "arachnoides"* is *A. arachnoidea* (L.) Burm. f., this being Linnaeus's *A. pumila* var. *arachnoidea* which was raised to specific rank in 1768 both by Burman and (probably later) by Miller, Gard. Dict., ed.8: the spelling *A. "arachnoides"* was used by Thunberg in one of his earlier works (Diss. Bot.-med. Aloe, 7) in 1785.

Thus only the 13 names in the right-hand column above have to be considered, and it is at once notable that they all have common-place epithets which might occur to any author coining names for new species. Furthermore, Thunberg's descriptions of these species all differ more or less from those given (or referred to) by Burman for his species, and while Thunberg was in the habit of remodelling descriptions (even for Linnaean species) the differences in some cases are so striking that it is difficult to believe that he is referring to Burman's species. For example:

*Psoralea linearis* Burm. f.: "foliis simplicibus . . . floribus terminalibus ternis".  
*Psoralea linearis* Thunb.: "foliis ternatis . . . floribus lateralibus solitariis".

*Ononis strigosa* Burm. f.: "floribus axillaribus sessilibus".  
*Ononis strigosa* Thunb.: "umbellis terminalibus".

*Limeum aethiopicum* Burm. f.: "foliis ovato oblongis".  
*Limeum aethiopicum* Thunb.: "foliis lineari-lanceolatis".

From the above we have the following points:

- (1) Thunberg nowhere refers directly to Burman's *Prodromus*.
- (2) Only very few of Thunberg's names coincide with names proposed by Burman and not used by any other author.
- (3) Of these few, all have common-place epithets and all have descriptions differing (sometimes fundamentally) from Burman's.

My conclusion is that none of Thunberg's names (except *Polygala stipulacea*, and *Lobelia volubilis* which he adopted through Linnaean works) can be accepted as an application of a new Burman name; and that all the names listed in the right-hand column above, including *Cestrum venenatum*, are to be regarded as illegitimate later homonyms published as new by Thunberg.