

## New combinations in *Hoodia* and *Lavrania* (Asclepiadaceae – Stapelieae)

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Plowes (1992) transferred several species of *Trichocaulon* N.E. Brown to *Hoodia* Sweet ex Decne, in so doing anticipating some of the changes made in a revision of these genera (Bruyns, in press). So as not to have any more of the intended changes anticipated, the following new combinations are made. These will be discussed in detail in the revision mentioned above.

Nuwe kombinasies in die genusse *Hoodia* Sweet ex Decne en *Lavrania* is gemaak. Verdere besonderhede sal in 'n volledige artikel gegee word.

1. *Hoodia* Sweet ex Decne in DC., *Prodr.* 8: 664 (1844)

*Hoodia triebneri* (Nel) Bruyns comb. nov., non *Hoodia triebneri* Hans Schuldt in *Desert*: 92 (1933) nom. nud. *Trichocaulon triebneri* Nel in *Kakteenkunde*: 117 (1935). *Hoodia foetida* Plowes in *Asklepios* 56: 9 (1992) nom. superfl.

2. *Lavrania* Plowes in *Cact. Succ. J. (US)* 58: 123 (1986)

*Trichocaulon* N.E. Br. in *J. Linn. Soc.* 17: 164 (1878) pro parte Sect. *Cactoidea* White & Sloane in *Stapelieae* 3: 997 – 1049. *Leachia* Plowes in *Asklepios* 56: 11 (1992) nom. illegit. non Cassini, *Dict. Sci. Nat.* 25: 388 (1822). (Asteraceae).

(a) *Lavrania cactiformis* (Hook.) Bruyns comb. nov.  
*Stapelia cactiformis* W.J. Hooker in *Bot. Mag.* 71: t. 4127 (1845).

(b) *Lavrania marlothii* (N.E. Br.) Bruyns comb. nov.  
*Trichocaulon marlothii* N.E. Br., *Fl. Cap.* 4(1): 894 (1909).

(c) *Lavrania perlata* (Dinter) Bruyns comb. nov.  
*Trichocaulon perlatum* Dinter in *Feddes Rep. sp. nov.* 19: 155 (1923).

(d) *Lavrania picta* (N.E. Br.) Bruyns comb. nov.  
*Trichocaulon pictum* N.E. Br. in *Kew Bull. misc. inf.*: 307 (1909).

### References

- BRUYNS, P. (in press). A revision of *Hoodia* and *Trichocaulon*. *Bot. Jb.*  
BULLOCK, A.A. 1957. Notes on African Asclepiadaceae 8: The generic name *Hoodia*. *Kew Bull.* 1956: 508.  
PLOWES, D.C.H. 1992. A preliminary re-assessment of the genera *Hoodia* and *Trichocaulon*. *Asklepios* 56: 5 – 15.

## *Pappea capensis*: monoecious, dioecious or androdioecious?

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*Pappea capensis* used to be regarded a dioecious plant. In this short communication, evidence is provided which shows that *Pappea capensis* is monoecious with a distinct male phase followed by a distinct female phase.

*Pappea capensis* is in die verlede deur verskeie outeurs as 'n tweehuisige plant beskryf. In hierdie kort mededeling word gegewens aangebied wat daarop dui dat *Pappea capensis* 'n eenhuisige plant is waar 'n feitlik suiwer manlike fase deur 'n feitlik suiwer vroulike fase opgevolg word.

**Keywords:** Flowering phenology, monoecy, *Pappea capensis*, sex change, Sapindaceae.

*Pappea capensis* was named by Ecklon and Zeyher in honour of Dr Ludwig Pappé (1803 – 1862), the first Colonial Botanist and Professor of Botany at the Cape (Palmer & Pitman 1972). The tree is widely distributed in eastern tropical Africa, South Africa and Namibia. Various species and varieties have in the past been included in this genus, but botanists now tend to consider *Pappea* a monotypic, but variable genus. Two definite forms of this species occur in South Africa. Trees that grow in the more moist eastern and northern parts of southern Africa, that is, Natal, Zululand, Swaziland and Transvaal, are medium-sized and more vigorous than those growing in the more arid parts, viz. the Karoo, eastern Cape, Namaqualand, Botswana and Namibia. In these arid regions, the trees bear smaller leaves and fruits as well as shorter inflorescences (Palmer & Pitman 1972).

Both Phillips (1926/1951) and Dyer (1975) described *Pappea* as dioecious. Exell (1966), Coates Palgrave (1977) and Palmer and Pitman (1972) also stated that male and female flowers are borne on separate trees. Van Wyk (1984) stated that male and bisexual flowers are borne on different trees. These statements were based on occasional collector observations and interpretation of herbarium specimens. No detailed study regarding the sex expression of *Pappea capensis* had been made by those authors. In a preliminary study of sexual reproduction in *Pappea*, we noticed that the trees were neither dioecious nor androdioecious, but appeared to be monoecious. In this paper we supply evidence which supports our first observations.

Trees used in the study were chosen from three different localities in and around Pretoria. In the first locality, a single old tree that survived the urbanization of Brooklyn, one of the older suburbs of Pretoria, was observed. The second locality was in the Roodeplaat nature reserve, 25 km north-east of Pretoria where 8 trees were observed, and in the third locality, in the National Botanical Gardens, Pretoria, 3 trees were observed. Trees along the N1 highway between Pretoria and Pietersburg were also observed once. The trees