

## Notes on the Identity of *Parochetus africanus* Polhill (Leguminosae - Papilionoideae)

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(Manuscript received 6 October, 1998; accepted 27 November, 1998)

**ABSTRACT:** *Parochetus africanus* Polhill is reduced as subspecies of the widely distributed *P. communis* Buch - Ham. ex D. Don.

**KEY WORDS:** *Parochetus africanus*, Leguminosae, Taxonomy.

The genus *Parochetus* was described by D. Don (1825) with two species (viz., *P. communis* and *P. major*). He distinguished these two species based on their leaf margins. The leaves with dentato-serrate margins he named *P. communis* and those with crenate margins as *P. major*. Royle (1835) recognised a third species, *P. oxalidifolia*, based on completely entire leaf margins. Subsequent workers (Bentham, 186; Baker, 1876; Gillett, 1971; Rudd, 1980; Sanjappa, 1991) observed considerable variations and regular gradation between entire and serrate margins and treated *P. major* and *P. oxalidifolia* as synonyms of *P. communis*.

Recently Beckett and Polhill (1991) observed that the African plants which were hitherto called *P. communis* Buch.-Ham. ex D. Don differ from Himalayan plants in habit, phenology and flower structure and describe them as a second species, *P. africanus* Polh. The similarities and differences between *P. communis* Buch.-Ham. ex D. Don and *P. africanus* Polh. as mentioned in Beckett and Polhill (1991) as well as in the present work is given in Table 1. Beckett and Polhill (1991) observed distinct tubers (up to 4 cm long) in the Himalayan plants (in cultivation) while we have not noticed any tuber or tuber like structure except root nodules in any natural population of *P. communis*. All natural populations we have seen mostly spreading plants rooting at nodes like those observed in Africa. Stipules are free or almost free in Indian plants (*P. communis*) and they joined at base in *P. africanus*, but Gillett (1971) recorded them almost free in African plants. The study of the genus in India, showed that flower colour and length, standard shape and length, length of its claw and length of upper auricle of wing petals show great diversity among different populations. The present investigations record differences between two species only in length of upper auricle of wing petals, shape of keel petals and phenology which may be due to ecological or geographical variations and suggest to treat the African plants as a subspecies of *P. communis*.

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Table 1. Similarities and differences between African and Himalayan plants of *Parochetus*

Characters	Beckett & Polhill's (1991) observations		Present observation ( <i>P. communis</i> ) from India, Himalayan plants
	<i>P. africanus</i> , African Plants	<i>P. communis</i> , Himalayan plants	
Roots	Roots without tubers, only with minute root nodules.	Roots with well developed tubers (up to 4 cm long).	Roots without tubers, only with minute root nodules.
Stems	Spreading (creeping), rooting at nodes.	Spreading to semierect, occasionally rooting at nodes.	Spreading (creeping) to semierect, rooting at nodes in spreading plants.
Stipules	Joined at base.	Not mentioned.	Free.
Flowers	More chubby, bright blue, lined white to throat with tip of keel darker or rarely white.	Bright blue.	Bright blue or white or pink, 1.4 - 2.0 cm long.
Standard	1.2 - 1.8 cm long, broadly ovate-elliptic, shortly clawed.	Not mentioned.	1.4 - 2.0 x 0.8 - 1.6 cm, obovate, broadly obovate or obovate-elliptic, claw 3 - 5 mm long.
Wings	Upper auricle of wing petals 0.5 - 1.5 mm long.	Upper auricle of wing petals 2.5 - 4.0 mm long.	Upper auricle of wing petals 2 - 4 mm long.
Keels	Subangular near the middle of the blade, almost straight along the upper margin.	Upper margin upcurved near the tip with a distinct beak.	Upper margin abruptly upcurved near the tip with a distinct beak.
Phenology	Autumn to Summer (in cultivation).	Summer to Autumn.	Summer to Autumn.

***Parochetus communis*** Buch.-Ham. ex D. Don subsp. ***africanus*** (Polh.) Chaudhary & Sanjappa, *comb. & stat. nov.*

*P. africanus* Polh. in Kew Mag. 8: 56. 1991.

### ACKNOWLEDGEMENTS

The authors are grateful to the Directors Botanical Survey of India, Calcutta and National Botanical Research Institute, Lucknow for providing facilities. Thanks are also due to Dr. R.

M. Polhill, Royal Botanic Gardens, Kew, U. K. for his perceptive comments on an earlier version of this paper.

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## 非洲藍雀花（豆科，蝶形花亞科）之鑑定小誌

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(收稿日期: 1998 年 10 月 6 日; 接受日期: 1998 年 11 月 27 日)

### 摘 要

本文將非洲藍雀花重新組合並降階為藍雀花(*Parochetus communis* Buch-Ham. ex D. Don.)之亞種。

關鍵詞：非洲藍雀花、豆科、分類學。

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