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# Studies in Brassavola. I.

## By

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Introduction	31
Key to the Sections of Brassavola	
Key to the Species and Varieties of sect. Sessililabia	32
List of Species and Varieties	33
Summary	
Bibliography	

#### Introduction

Of the four sections which comprise the genus Brassavola R. Br., the species and varieties of sect. Sessililabia Rolfe undoubtedly present the greatest difficulty from a taxonomic point of view. Unlike the well-known species of sect. Brassavola and sect. Cuneilabia Rolfe — some of which have been in cultivation since the end of the seventeenth century — the members of sect. Sessililabia Rolfe are not well represented in collections; indeed, some of the species appear to be known only from the type-specimens, and have probably never been cultivated. Although, basically, the species of this section form a fairly homogeneous group, nearly all the taxa are subject to certain minor variations in the shape of the labellum and the anther; and these differences have been used by authors to split the section up into a large number of species. If such minor variations are to be considered diagnostic, however, nearly every plant collected in the wild would have to be described as a new species.

The interpretation given below differs somewhat from that of previous authors (Cogniaux 1899, Rolfe 1902, Schlechter 1919). Both Cogniaux and Schlechter accepted the species described by Rodrigues 1877 and 1882; but Rolfe 1902 evaded the difficulty presented by these taxa, simply remarking that they were "not yet introduced to cultivation".

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In my list, I have reduced the Rodrigues species to synonymy under some of the older names. The authors cited above also agreed in treating Br. fragrans Lem. as distinct from Br. fragrans Rodr.; but I consider these two concepts to be taxonomically as well as nomenclaturally identical. Rolfe went so far as to suggest that Lemaire's two publications on Br. fragrans referred to two different species, assigning that of 1853 to the synonymy of Br. Perrinii Lindl.; while the 1858 paper was cited under Br. tuberculata Hook. If this interpretation is considered correct, then Br. fragrans Rodr., as a later homonym of Br. fragrans Lem., would require a new specific epithet.

The species and varieties of Br. sect. Sessililabia, as I understand them, may be divided into two subsections or alliances, corresponding roughly to Schlechter's sections Prinoglossum and Conchoglossum. In the group of species related to Br. Martiana Lindle., the labellum is relatively narrow, with fimbriate margins; this group is largely of northern distribution, extending from the Guianas through Venezuela and Colombia to northern Brazil. In the group of species related to Br. tuberculata Hook., however, the labellum is broader, with the margins entire; and the species are found mainly in southern Brazil, Peru, Bolivia, Paraguay and northern Argentina. Unfortunately, the difference between these two groups is somewhat blurred by the existence of Br. Gardneri Cogn., which appears to represent an intermediate stage.

All the species and varieties of *Br.* sect. *Sessililabia* are confined geographically to the South America continent. Of the 11 taxa dealt with below, 4 appear to be peculiar to Brazil.

# Key to the Sections of Brassavola

- 1. Leaves flattened ...... sect. 1. Grandiflorae Rolfe
- 1. Leaves terete or semi-terete.
  - 2. Apex of the labellum attenuated . . . . . sect. 2. Brassavola
  - 2. Apex of the labellum not attenuated.
    - 3. Labellum sessile ...... sect. 3. Sessililabia Rolfe
    - 3. Labellum cuneiform . . . . . . sect. 4. Cuneilabia Rolfe

Key to the Species and Varieties of sect. Sessililabia Rolfe

- 1. Margins of the labellum entire.
  - 2. Pseudobulbs cylindrical.
    - 3. Apex of the labellum acute.
      - 4. Inflorescence equal to or slightly longer than the leaves.
        - 5. Inflorescence 1—3 flowered ...... Br. tuberculata
        - 5. Inflorescence 4—12 flowered ...... Br. fragrans
      - 4. Inflorescence much shorter than the leaves.

6. Inflorescence 5—15 flowered Br. Perrinii
6. Inflorescence 2—3 flowered.
7. Inflorescence simple B Ceboletta
7. Inflorescence fasciculate Br. Ceboletta var. fasciculata
3. Apex of the labellum blunt Br. retusa
2. Pseudobulbs fusiform Br. Gardneri
1. Margins of the labellum fimbriate.
8. Flowers more than 4,5 cm in diameter.
9. Labellum 8-shaped
9. Labellum V-shaped.
10. Labellum less than 1 cm at broadest point Br. angustata
10. Labellum more than 1 cm at broadest point Br. Martiana
8. Flowers less than 4,5 cm in diameter Br. Martiana var. multiflora

# List of Species and Varieties

Brassavola tuberculata Hooker 1829: tab. 2878. — Br. trinervis Lindley 1831: 114. — Bletia tuberculata Reichenbach fil. 1861: 435. — Br. Gibbsiana Williams 1877: 149. — Br. revoluta Rodrigues 1882: 161. — Range: Brazil (endemic).

This species was originally named Br. trinervis by Lindley; but Hooker published his Br. tuberculata first. The species is immediately recognizable by the purple or chocolate-spotted sepals; it used to be much cultivated in the great days of the orchid species, but is rarely met with nowadays.

Brassavola fragrans Lemaire 1853: 78. — Br. fragrans Rodrigues 1877: 65. — Range: Brazil (endemic).

This species was originally described under the name Br. fragrans by Lemaire in 1853; but 24 years later Rodrigues again described it as new, and, it would seem, purely by coincidence, he also named it Br. fragrans! The species is closely related to Br. tuberculata, from which it may be distinguished by the many-flowered inflorescence and somewhat larger flowers. Also the markings on the sepals are much less distinct than in Br. tuberculata, which rather leads me to suspect that Br. fragrans may be a natural hybrid between Br. tuberculata and Br. Perrinii. All three of these taxa are found in the Brazilian state of Santa Catarina.

Brassavola Perrinii Lindley 1832: tab. 1561. — Br. flagellaris Rodrigues 1882: 161. — Range: Brazil, Paraguay, Bolivia.

Apparently a rather common species, distinguished from Br. tuber-culata and Br. fragrans by the absence of any markings on the sepals and the more numerous inflorescence.

Brassavola Ceboletta Reichenbach fil. 1855: 221. — Br. chacoensis Kränzlin 1905: 7—8. — Br. ovaliformis Schweinfurth 1949: 60. — Range: Brazil, Peru, Argentina.

I was at first inclined to regard Br. ovaliformis as distinct (Jones 1967); but later research revealed that Br. Ceboletta and Br. chacoensis are undoubtedly earlier names for the same plant.

Brassavola Ceboletta var. fasciculata (Pabst) H. G. Jones comb. nov. — Br. fasciculata Pabst 1955: 126. — Br. ovaliformis var. fasciculata H. G. Jones 1967: 8. — Range: Brazil (endemic).

This variety is distinguished from the var. Ceboletta by the peculiar, fasciculate form of the inflorescence.

Brassavola retusa Lindley 1847: tab. 20. — Bletia retusa Reichenbach fil. 1861: 435. — Range: Venezuela, Brazil.

I have recently discussed this species in another paper (Jones 1968a). It is easily distinguished by its dwarf habit and the obovate, truncate form of the labellum, which is unique in this section of the genus.

Brassavola Gardneri Cogniaux 1899: 263. — Range: Brazil (endemic).

A rather peculiar species, somewhat related to *Br. Martiana* LINDL., from which it may be distinguished by the thickened form of the pseudo-bulbs and the unbroken margins of the labellum.

Brassavola amazonica Poeppig & Endlicher 1835: 3. — Bletia amazonica Reichenbach fil. 1861: 434. — Range: Brazil, Venezuela.

Closely related to Br. Martiana, with which it is frequently confused; but easily distinguished by the very different shape of the labellum, which is clearly delineated in the original illustration.

Brassavola angustata Lindley 1838: 41. — Br. surinamensis Focke 1851: 71. — Bletia angustata Reichenbach fil. 1861: 434. — Range: Guyanas, Venezuela.

Distinguished from Br. Martiana by the very narrow labellum and few-flowered inflorescence. In a recent paper on Guyanese orchids (Jones 1968b), I followed traditional usage in assigning the name Br. surinamensis to the synonymy of Br. Martiana; but subsequent research has revealed that this name belongs here. This interpretation is substantiated by a note on the type-sheet of Br. angustata in Lindley's herbarium.

Brassavola Martiana Lindley 1836: tab. 1914. — Bletia Martiana Reichenbach fil. 1861: 434. — Range: Guyanas, Venezuela, Colombia, Brazil.

A widespread and apparently rather common species in the northern regions of the South American Continent.

Brassavola Martiana var. multiflora (SCHLECHTER) H. G. JONES 1968b: 22. — Br. multiflora SCHLECHTER 1919: 48. — Br. Duckeana Horta 1937: 25. — Range: Brazil, Venezuela, Guyana.

Distinguished from the var. *Martiana* by the smaller flowers and usually — but not always — more numerous inflorescence.

### Summary

A nomenclatural revision of *Brassavola* sect. *Sessililabia* Rolfe, for which is accepted a total of nine species and two varieties. One new combination, *Brassavola Ceboletta* var. *fasciculata* (Pabst pro sp.) H. G. Jones, is proposed.

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