

Species Datasheet

Datasheet No. A-061.086.002
(family.genus.species)

DBT- Network Programme

1. Taxon:

Species: *Rhynchostylis retusa* (L.) Blume

Subspecies:

Variety:

Cultivar

Hybrid

Image file

2. Synonyms: *Aerides guttata* (Lindl.) Roxb., *Aerides praemorsa* Willd., *Aerides retusa* (L.) Sw., *Aerides spicata* D. Don, *Aerides undulata* Sm., *Epidendrum hippium* Buch.-Ham. ex D. Don, *Epidendrum indicum* Poir., *Epidendrum retusum* L., *Gastrochilus blumei* (Lindl.) Kuntze, *Gastrochilus garwalicus* (Lindl.) Kuntze, *Gastrochilus retusus* (L.) Kuntze, *Gastrochilus rheedei* (Wight) Kuntze, *Gastrochilus spicatus* (D. Don) Kuntze, *Limodorum retusum* (L.) Sw., *Orchis lanigera* Blanco, *Rhynchostylis albiflora* I. Barua & Bora, *Rhynchostylis garwalica* (Lindl.) Rehb. f., *Rhynchostylis guttata* (Lindl.) Rehb. f., *Rhynchostylis praemorsa* (Willd.) Blume, *Rhynchostylis retusa* f. *albiflora* (I. Barua & Bora) Christenson, *Saccolabium blumei* Lindl., *Saccolabium garwalicum* Lindl., *Saccolabium guttatum* (Lindl.) Wall., *Saccolabium heathii* auct., *Saccolabium macrostachyum* Lindl., *Saccolabium praemorsum* (Willd.) Lindl., *Saccolabium retusum* (L.) Voigt, *Saccolabium rheedei* Wight, *Saccolabium spicatum* (D. Don) Lindl., *Sarcanthus guttatus* Lindl.

3. Systematic Position:

APG IV (2016)

- Kingdom: Plantae
- Clade: Angiosperms
- Clade: Monocots
- Order: Asparagales Link
- Family: Orchidaceae Juss.
- Subfamily: Epidendroideae
- Tribe: Vandeae
- Subtribe: Aeridinae
- Genus: *Rhynchostylis* Blume
- Species: *Rhynchostylis retusa* (L.) Blume

Bentham and Hooker (1862)

Kingdom: Plantae
Division: Phanerogamia
Class: Monocotyledonae
Series: Microspermae
Ordo: Orchideae
Tribus: Vandeae
Subtribus: Sarcantheae
Genus: *Rhynchostylis* Blume
Species: *Rhynchostylis retusa* (L.) Blume

4. Distribution:

Global: Chinese Himalayas, Bangladesh, India (eastern Himalayas, Assam), Sri Lanka, Nepal, Western Himalayas, Andaman Islands, Myanmar, Thailand, Laos, Cambodia, Vietnam, Malaysia, Borneo, Java, Sumatra, and the Philippines, sea level to 1200m

India: Along the Himalayas from Dalhousie to Assam in the tropical valleys 1000m, Orissa, Andhra Pradesh,

5. Indigenous/Exotic/Endemic; Cultivated/Wild: Indigenous, cultivated

6. Threat Status:

IUCN:

BSI:

7. Habit and Habitat: Epiphytic, grows mostly on mango trees

8. Life Form: Phanerophytes

9.Economic Importance:Cultivated ornamental, medicinal, root used in blood dysentery, leaves used to treat rheumatism

10. Probable Progenitor of:

11.DNA

C-value	Methodology
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2C (5.15 pg) ¹¹	Feulgen microdensitometry ¹¹
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12.Basic chromosome number(s): $x=19$ ^{1, 2, 4, 5, 6, 7, 8, 9, 10, 11, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22}

13. Zygotic chromosome number(s): $2n=38$ ^{1, 2, 4, 5, 6, 7, 9, 11, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22}

14. Gametic chromosome number(s): $n=19$ ^{1, 7, 8, 10, 15, 17}

15.Specialized chromosomes (B chromosomes/Sex chromosomes/Polytene chromosomes/Neocentric chromosomes):

Image file

16.Ploidy level:Diploid^{1, 2, 5, 4, 6, 7, 8, 9, 10, 11, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22}

Image file

17.Agametoploidy:

18.Nature of polyploidy (auto, segmental, allo, autoallo):

19.Genomic formula:

20.Aberrant chromosome number(s)(aneuploidy, aneusomaty, polysomaty):

21.Somatic chromosomes:^{4, 7, 8, 13}

Karyotype Median, submedian^{4, 7, 8, 13}

Chromosome size Small^{4, 7, 8, 13}

NOR chromosome(s)^{8¹³}

Degree of asymmetry Symmetrical^{4, 7, 8, 13}

Image file

22. Banding pattern(s):

Image file

23.Physical mapping of chromosomes:

In situ hybridization

Image file

Fluorescent in situ hybridization:

Image file

24.Genomic in situ hybridization:

Image file

25. Linkage map:

Image file

26.Chromosome associations:

Female meiosis

Male meiosis 1911^{4, 7, 8}

Image file

27.Chromosome distribution at anaphase I:

28. Genetic diversity:

Chromosomal level

Image file

DNA level 12

29.Any other information (Apomixis; Inversion; Male sterility;Pollen grain mitosis; Pollen stainability;Translocationsetc.):