

Datasheet No. A-061.097
(Family: Genus)

DBT- Network Programme

1. Genus: *Smitinandia* Holttum

2. Systematic Position:

APG IV (2016)

- Kingdom: Plantae
- Clade: Angiosperms
- Clade: Monocots
- Order: Asparagales Link
- Family: Orchidaceae Juss.
- Subfamily: Epidendroideae
- Tribe: Vandeae
- Subtribe: Aeridinae
- Genus: *Smitinandia* Holttum

3. Species:

Global: 3

India: 2

4. Taxonomic riddles: 13

5. Distribution:

Global: Bangladesh, Borneo, Cambodia, China South-Central, India, Laos, Malaya, Myanmar, Nepal, Sulawesi, Thailand, Vietnam

India: Andaman & Nicobar Islands, Arunachal Pradesh, Assam, Chhattisgarh, Jharkhand, Manipur, Meghalaya, Mizoram, Nagaland, Odisha, Sikkim, Uttarakhand, West Bengal

6. Habit and Habitat: Epiphytic herb

7. Economic Importance: Ornamental

8. DNA content range:

Methodology

2C (4.19 pg)¹

Flow cytometry¹

9. Basic chromosome number(s): x=19^{1, 2, 4, 5, 6, 7, 8, 9, 10, 11, 12}

10. Zygotic chromosome number(s): $2n=38$ ^{1, 2, 3, 5, 6, 8, 11, 12}

11. Gametic chromosome number(s): $n=19$ ^{2, 4, 5, 6, 7, 9, 10}

12. Specialized chromosomes (B chromosomes/Sex chromosomes/Polytene Chromosomes/Neocentric chromosomes):

13. Ploidy level Diploid^{1, 2, 4, 5, 6, 7, 8, 9, 10, 11, 12}

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

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

16. Karyograms: 2, 4, 5

Meiosis: 2, 4, 5, 7, 9, 10

17. Banding pattern(s):

18. Physical mapping of chromosomes:

GISH:

19. Phylogenetic relationship at Chromosomal; DNA level:¹³

20. Cytogenetic mechanism (s) underlying evolution: