

Species Datasheet

Datasheet No. A-028.003.003
(family.genus.species)

DBT- Network Programme

-

1. Taxon:

Species *Amorphophallus bulbifer* (Roxb.) Blume

Subspecies

Variety

Cultivar

Hybrid

Image file

2. Synonyms: *Amorphophallus aculatum* Hook.f., *A. bulbifer* var. *atroviridimaculata* Engl., *A. bulbifer* var. *marmoratus* Engl., *A. bulbifer* var. *tuberuliger* (Schott) Engl., *A. taccoides* Hook.f., *A. tuberculiger* (Schott) Engl., *Arum bulbiferum* Roxb., *A. punctulatum* Zipp. ex Kunth, *Arum spectabile* Zipp. ex Kunth, *Conophallus bulbifer* (Roxb.) Schott, *C. tuberculiger* Schott, *Pythonium bulbiferum* (Roxb.) Schott

3. Systematic Position:

APG IV (2016)

- Kingdom: Plantae
- Clade: Angiosperm
- Clade: Monocots
- Order: Alismatales R. Br. ex Bercht. & J. Presl
- Family: Araceae Juss.
- Genus: *Amorphophallus* Blume ex Decne.
- Species *A. bulbifer* (Roxb.) Blume

Bentham and Hooker (1862)

Kingdom: Plantae
Division: Phanerogamia
Class: Monocotyledones
Series: Nudiflorae
Ordo: Aroideae Arn.
Genus: *Amorphophallus* Blume ex Decne.
Species: *A. bulbifer* (Roxb.) Blume

4. Distribution:

Global: Bangladesh, Burma, Myanmar, Nepal, India

India: Goa, Jharkhand, Karnataka, Maharashtra, Madhya Pradesh

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

6. Threat Status:

IUCN:

BSI:

7. Habit and Habitat: Tuberous herb. Forest edges, village groves, roads sides in forest areas, grows in humus rich soil.

8. Life Form: Geophyte

9. Economic Importance:

10. Probable Progenitor of:

11. DNA

C- value

2C (18.57pg)¹

Methodology

Feulgen microdensitometry ¹

12. Basic chromosome number(s): $x=13^5$

13. Zygotic chromosome number(s): $2n=26^2$

$2n=36^{3,4}$

$2n=39^{1,5,6,7,8,9,10}$

14. Gametic chromosome number(s):

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

Image file

16. Ploidy level: Triploid^{1,5,6,8,9,10}

Image file

17. Agametoploidy

18. Nature of polyploidy (auto, segmental, allo, autoallo): Autotriploid^{1,10}, allotriploid⁶

19. Genomic formula:

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

21. Somatic chromosomes:

Karyotype Majority metacentric chromosomes^{1,6,10}, majority submetacentric chromosomes⁸

Chromosome size Small^{1,6,10}, medium to large^{8,9}, large⁵

NOR chromosome(s) 3NOR¹, 1NOR⁶

Degree of asymmetry: Stebbin's 2B class⁸, moderately symmetrical¹⁰

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

Image file

27. Chromosome distribution at anaphase I:

28. Genetic diversity:

Chromosomal level

Image file

DNA level^{11,12}

29. Any other information (Apomixis; Inversion; Male sterility; Pollen grain mitosis; Pollen stainability; Translocations etc): Apomixis^{9,10},
pollen fertility 5.69%¹⁰