

Species Data Sheet

Datasheet No. A-045.001.004
(family.genus.species)

DBT- Network Programme

1. Taxon:

Species: *Dioscorea bulbifera* L.

Subspecies

Variety

Cultivar

Hybrid

Image file

2. Synonyms: *Dioscorea anthropophagorum* A. Chev., *D. bulbifera* var. *albotuberosa* Y.F. Zhou, Z.L. Xu & Y.Y. Hang, *D. bulbifera* var. *anthropophagorum* (A. Chev.) Summerh., *D. bulbifera* var. *crispata* (Roxb.) Prain, *D. bulbifera* var. *elongata* (F.M. Bailey) Prain & Burkill, *D. bulbifera* var. *pulchella* (Roxb.) Prain, *D. bulbifera* var. *sativa* Prain, *D. bulbifera* var. *suavia* Prain & Burkill, *D. bulbifera* var. *vera* Prain & Burkill, *D. crispata* Roxb., *D. heterophylla* Roxb., *D. hoffa* Cordem., *D. hofika* Jum. & H. Perrier, *D. korrorensis* R. K. Nuth, *D. latifolia* Benth., *D. longipetiolata* Baudon, *D. perrieri* R. K. Nuth, *D. pulchella* Roxb., *D. rogersii* Prain & Burkill, *D. sativa* f. *domestica* Makino, *D. sativa* var. *elongata* F.M. Bailey, *D. sativa* var. *rotunda* F.M. Bailey, *D. sylvestris* De Wild., *D. tamifolia* Salisb., *D. tenuiflora* Schtdl., *D. violacea* Baudon, *Helmiabulbifera* (L.) Kunth, *Polynomebulbifera* (L.) Salisb.

3. Systematic position:

APG IV (2016)

- Kingdom: Plantae
- Clade: Angiosperm
- Clade: Monocot
- Order: Dioscoreales Mart.
- Family: Dioscoreaceae R. Br.
- Genus: *Dioscorea* L.
- Species: *D. bulbifera* L.

Bentham and Hooker (1862)

Kingdom: Plantae
Division: Phanerogams
Class: Monocotyledons
Series: Epigynae
Ordo: Dioscoreaceae R. Br.
Genus: *Dioscorea* L.
Species: *D. bulbifera* L.

4. Distribution:

Global: Namibia, Zambia, Zimbabwe, Malawi, Mozambique, Africa and Asia

India: Gujarat, Maharashtra, Goa, Karnataka, Tamil Nadu, Kerala

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

6. Threat Status:

IUCN:

BSI:

7. Habit and Habitat: Climbing herb. Found in various forest and woodland types, including mopane. It may require higher rainfall and nutrient levels

8. Life Form: Tuberous geophyte

9. Economic Importance: Commonly grown or cultivated for edible tubers.

10. Probable Progenitor of:

11.DNA

C-value	Methodology:
$2C = 2.40\text{pg}^{22}$	Flow Cytometry ²²

12. Basic chromosome number(s): $x=10^6$

13. Zygotic chromosome number(s): $2n=36^{4,8,40^{1,3,4,8,11,14,16,21}}50^{17}54^860^{1,5,8,14,22}70^{5,14}80^{1,6,8,15,16,17,21,22,32}95^898^{8,16}99^{8,16}100^{6,8,15,16,21}$

14. Gametic chromosome number(s):

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

Image file

16. Ploidy level: Tetraploid⁸Hexaploid^{8,22}Octaploid⁶Decaploid⁶

Image file

17. Agamete ploidy:

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

19. Genomic formula:

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

21. Somatic chromosomes:

Karyotype:

Chromosome size:

NOR chromosome(s):

Degree of asymmetry:

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

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