

Species Datasheet

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Datasheet No. P-041.005.005
(family.genus.species)

DBT- Network Programme

1. Taxon:

Species: *Diplazium esculentum* (Retz.) Sw.

Subspecies:

Variety:

Cultivar

Hybrid

Image file

2. Synonyms:

[*Anisogonium esculentum* \(Retz.\) C. Presl](#)

[*Anisogonium serampurens* C. Presl](#)

[*Asplenium ambiguum* Sw.](#)

[*Asplenium esculentum* \(Retz.\) C. Presl](#)

[*Asplenium malabaricum* Mett.](#)

[*Asplenium moritzii* Mett.](#)

[*Asplenium pubescens* Mett.](#)

[*Asplenium vitiense* Baker](#)

[*Athyrium ambigua* \(Sw.\) Milde](#)

[*Athyrium esculentum* \(Retz.\) Copel.](#)

[*Callipteris ambigua* \(Sw.\) T. Moore](#)

[*Callipteris esculenta* \(Retz.\) J. Sm. ex T. Moore & Houlston](#)

[*Callipteris esculenta* var. *pubescens* \(Link\) Ching](#)

[*Callipteris malabarica* J. Sm.](#)

[*Callipteris serampurens* Fée](#)

[*Digrammaria ambigua* \(Sw.\) C. Presl](#)

[*Digrammaria esculenta* J. Sm.](#)

[*Diplazium malabaricum* Spreng.](#)

[*Diplazium pubescens* Link](#)

[*Diplazium serampurens* Spreng.](#)

[*Diplazium vitiense* Carruth.](#)

[*Gymnogramma edulis* Ces.](#)

[*Hemionitis esculenta* Retz.](#)

[*Microstegia ambigua* \(Sw.\) C. Presl](#)

[*Microstegia esculenta* \(Retz.\) C. Presl](#)

[*Microstegia pubescens* C. Presl](#)

3.Systematic Position:

Christenhusz 2011

- Class: Equisetopsida C.Agardh
- Subclass: Polypodiidae Cronquist, Takht. & Zimmerm.
- Order: Polypodiales Link.
- Family: Athyriaceae Alston
- Subfamily:
- Genus: *Diplazium* Swartz
- Species: *Diplazium esculentum* (Retz.) Sw.
- Subspecies:
- *Variety*:

4.Distribution:

Global:Tropics of Asia, north to Central China and S Japan, east to S Pacific Islands.

India: Eastern Himalaya, Peninsular India

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

6.Threat Status:

IUCN:

BSI:

7.Habit and Habitat:A weed of swampy places, usually on moist, level ground in paddy fields or along rivers in open places or at least in light shade at low or medium elevations less than 800 m alt.

8.Life Form:

9.Economic Importance:

10. Probable Progenitor of:

11.DNA

12. Basic chromosome number(s): $x=41$ ^{1, 3, 6, 8, 9, 10, 11, 14, 15, 16, 22, 25, 26, 28, 29, 30, 32, 43, 44, 46, 48, 49, 50, 53, 54, 55}

13. Zygotic chromosome number(s): $2n=82$ ^{3, 20, 32, 34, 44, 47, 49, 52}

14. Gametic chromosome number(s): $n=41$ ^{1, 3, 6, 8, 9, 10, 11, 14, 15, 16, 22, 25, 26, 28, 29, 30, 32, 43, 44, 46, 48, 49, 50, 53, 54, 55} ,
 ^{82 ^{4, 46, 50}}

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

Image file

16. Ploidy level: Diploid (sexual) ^{1, 3, 6, 7, 8, 10, 11, 12, 13, 14, 15, 16, 20, 22, 25, 26, 28, 29, 30, 32, 34, 43, 44, 46, 47, 48, 49, 50, 52, 53, 54, 55} ,
Tetraploid (sexual) ^{4, 46, 50}

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: ⁴⁷

KaryotypeMedian, submedian and subterminal⁴⁷

Chromosome sizeSmall⁴⁷

NOR chromosome(s)

Degree of asymmetryModerately asymmetrical⁴⁷

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 meiosisDiploid: 41II^{1, 3, 6, 8, 9, 10, 11, 12, 13, 14, 15, 16, 22, 25, 26, 28, 30, 32, 43, 44, 48, 49, 50, 53, 54, 55} ,

Tetraploid: 82II^{4, 46, 50}

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.):