

Species Datasheet

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Datasheet No. P-002.002.006

- (family.genus.species)

DBT- Network Programme

1.Taxon:

Species: *Isoetes pantii* H.K.Goswami & B.S.Arya (unresolved)

Subspecies:

Variety:

Cultivar

Hybrid

Image file

2. Synonyms: Nil

3.Systematic Position:

Christenhusz 2011

- Class: Equisetopsida C.Agardh
- Subclass: Lycopodiidae Bek.
- Order: Isoetales Prantl
- Family: Isoetaceae Reichenb.
- Subfamily:
- Genus: *Isoetes* L.
- Species: *Isoetes pantii* H.K.Goswami & B.S.Arya (unresolved)
- Subspecies:
- Variety:

4.Distribution:

Global:India

India: Madhya Pradesh (Narsingharh)

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

6.Threat Status:

IUCN:

BSI:

7.Habit and Habitat:

8.Life Form:

9.Economic Importance:

10. Probable Progenitor of:

11.DNA

C-value Methodology

12.Basic chromosome number(s): $x=11^5$

13. Zygotic chromosome number(s): $2n=22+2f^5$,

24^6 ,

$33+1-3f^{5,7}$,

$36^{3,5,6,7}$,

$36+3f^5$,

$39^{3,6}$,

$44+1-2f^5$,

44^5 ,

$44+3f^5$,

$45f^5$,

$48^{3,6}$

14. Gametic chromosome number(s): $n=$

15.Specialized chromosomes (B chromosomes/Sex chromosomes/Polytene chromosomes/Neocentric chromosomes):X-chromosomeGoswami 1975

Image file

16.Ploidylevel:Diploid⁵,

Triploid⁵,

Triploid (aneuploid)^{3, 5, 6, 7},

Tetraploid⁵,

Tetraploid (aneuploid)^{3, 5, 6},

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:

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 Triploid (aneuploid): $22I+7III^5$,

Tetraploid: $23I+9II+1III$; $25I+8II+1III^5$,

Tetraploid (aneuploid) $1III+8II+26I^5$

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.):