

Genus Datasheet

Datasheet No. P-006.002

(Family.Genus)

DBT- Network Programme

1. Genus: *Ophioglossum* L.

2. Systematic Position:

Christenhusz 2011

- Class: Equisetopsida C. Agardh
- Subclass: Ophioglossidae Klinge
- Order: Ophioglossales Link
- Family: Ophioglossaceae Martinov.
- Subfamily:
- Genus: *Ophioglossum* L.

3. Species:

Global: Accepted (35), unassessed (84)

India:.

4. Taxonomic riddles:¹⁰

5. Distribution:

Global:

India:

6. Habit and Habitat:

7. Economic Importance:

8. DNA content range:

Methodology

2C (129.55-131.10pg)²⁹

Flow cytometry²⁹

2C (110.00pg) ³⁰Feulgen microdensitometry³⁰

9. Basic chromosome number(s): x=30 (Palaeobasic) ^{4, 6, 9, 11, 14, 15, 16, 19, 20, 27, 28, 39, 45},

120 (neobasic)^{4, 6, 9, 11, 14, 15, 16, 19, 20, 27, 28, 39, 45}

10. Zygotic chromosome number(s): $2n=180$ ^{6, 9, 15, 16},

c.200²¹,

232-240³⁸,

236³⁷,

240^{28, 39},

247³⁷,

210-215¹⁹,

c.300³²,

401³⁷,

c.404³⁷,

404-412³⁸,

480^{17, 18},

c.720²⁹,

756-768³⁸,

c.762³⁷,

782-790³⁸,

790³⁷,

c.960^{26, 29},

c.1020²⁴,

...²⁸

1280-82³⁷,

c.1320⁴⁷

11. Gametic chromosome number(s): $n=30$ ^{14, 15},

33±2^{9, 15},

34^{14, 15},

60^{14, 15},

86±4^{9, 15},

88±2^{8, 9, 12, 15},

90^{6, 9, 14, 15, 16},

90±2^{6, 7, 8},

108^{14, 15},

100^{14, 15},

100-126⁹,

108^{14, 15},

100-180^{13, 14},

110^{6, 7, 9, 14, 15},

112^{14, 15},

115^{14, 15},

116^{6, 9, 11, 14, 15},

116,117^{25, 43},

116-122⁹,

120^{6, 9, 11, 14, 15, 19, 20, 27, 28, 39, 45},

122⁴⁵

c.150-160³²,

166-182⁹,

180^{11, 15},

184¹⁴,

c.190²¹,

210²⁰,

212^{14, 15},

215²⁰,

c.230^{35, 36},

c.240⁴⁸,

c.240+2-3^{8, 14, 15, 40},

240^{6, 14, 15, 22, 27, 28, 31, 44},

c.243²²,

250-260²³,

c.270³,

340-346^{25, 43},

c.350^{33, 34},

350-365⁹,

c.360^{4, 5, 7},

360^{6, 8, 9, 14, 15},

385-390^{25, 43},

c410-420^{25, 43},

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425²⁸ ,

435²⁸ ,

436¹ ,

450²⁸ ,

c.450-460^{33, 34} ,

451¹ ,

466-475^{25, 43} ,

c.470²² ,

c.480¹⁴ ,

480^{6, 9, 14, 15, 25, 26, 28, 43, 49} ,

495^{20, 28} ,

c.500^{2, 25, 41, 42, 43} ,

c.510²⁴ ,

c.510-515²⁰ ,

515-520^{25, 43} ,

510^{14, 44, 46} ,

510-515⁴³ ,

510-575^{25, 43} ,

c.528^{35, 36} ,

564¹ ,

≈≈≈1

572¹ ,

631+10f¹ ,

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720^{4, 5}

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

13. Ploidy level:

Diploid ^{14, 15} ,

Diploid (aneuploid) ^{9, 15} ,

Tetraploid ^{14, 15} ,

Hexaploid^{6, 7, 8, 12, 14, 15, 16,}

Hexaploid (aneuploid)/Diploid^{9, 14, 15} ,

Hexaploid (aneuploid) ^{9, 14, 15} ,

Hexaploid (aneuploid)/? ^{13, 14, 15} ,

Hexaploid (aneuploid)/Diploid (aneuploid)^{14, 15, 21} ,

6x-8x aneuploid/2x aneuploid⁹ ,

Octoploid/Diploid ^{6, 9, 11, 14, 15, 17, 18, 19, 20, 27, 28, 39, 45} ,

Octoploid/Diploid (aneuploid)⁴⁵ ,

Octoploid (aneuploid)^{14, 15} ,

Octoploid(aneuploid)/Diploid (aneuploid) ^{6, 9, 11, 14, 15, 25, 37, 43} ,

12-ploid (aneuploid)/Triploid (aneuploid)¹⁴ ,
 12-ploid(aneuploid)/tetraploid (aneuploid)²¹ ,
 14-ploid/Tetraploid (aneuploid)^{19, 20} ,
 14x aneuploid/2x aneuploid³⁷ ,
 14-ploid (aneuploid)/ Tetraploid (aneuploid)^{14, 15, 19, 20} ,

 16-ploid (aneuploid)/Tetraploid (aneuploid) ^{3, 22, 23} ,
 16-ploid/Tetraploid^{6, 8, 14, 15, 40, 44} ,
 24-ploid (aneuploid)/Hexaploid (aneuploid) ^{9, 37} ,
 24-ploid/Hexaploid^{5, 6, 8, 9, 7, 14, 15, 29, 33, 34} ,
 26x aneuploid/6x aneuploidy ³⁷ ,
 28x/7x¹⁹ ,
 28x aneuploid/7x aneuploid¹ ,
 30x aneuploid/8x aneuploid^{1, 28} ,
 32-ploid/Octoploid (aneuploid) ^{2, 41, 42} ,
 32-ploid(aneuploid)/Octoploid (aneuploid) ^{20, 22} ,
 32-ploid/Octoploid^{6, 9, 14, 15, 26, 28, 29, 49} ,
 34x aneuploid/8x aneuploid²⁰ ,
 34x/8x aneuploid^{14, 35, 36} ,
 34-ploid/Octoploid (aneuploid) ^{24, 25, 43, 44, 45} ,
 38x aneuploid/10x aneuploid^{1, 5} ,
 42x aneuploid/10x aneuploid^{1, 27, 28, 37} ,
 42-ploid/10-ploid (aneuploid)¹⁸ ,

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

16. Karyograms:

Meiosis: 2, 3, 5, 6, 7, 8, 9, 11, 14, 15, 16, 19, 20, 22, 23, 24, 25, 26, 27, 28, 37, 38, 39, 40, 41, 42,

17. Banding pattern(s):

18. Physical mapping of chromosomes:

GISH:

19. Phylogenetic relationship at Chromosomal; DNA level: ¹⁰

20. Cytogenetic mechanism (s) underlying evolution:

21. Linkage map:

22. Any other information: