

Datasheet No. P-041.002
(Family:Genus)

1. Genus:*Athyrium*Roth

2. Systematic Position:

- Class: EquisetopsidaC.Agardh
- Subclass: PolypodiidaeCronquist, Takht. &Zimmerm.
- Order: Polypodiales Link.
- Family: Athyriaceae Alston
- Subfamily:
- Genus: *Athyrium* Roth

3. Species:

Global: 216 (accepted), 420 (unassessed)

India:.

4. Taxonomic riddles:

5. Distribution:

Global:

India:

6. Habit and Habitat:

7.Economic Importance:

8. DNA content range:

Methodology

2C (5.90 pg)²⁹FeulgenMicrodensitometry²⁹

2C (13.50-14.40pg)^{2, 3}Flowcytometry^{2, 3}

9. Basic chromosome number(s):x=36⁵⁸,

40^{1,5,7, 8, 9, 10,11, 12, 13, 15, 16, 17, 18, 19, 20, 21, 22, 24, 25, 26, 27, 30, 32, 33, 34, 35, 36, 37, 38, 39, 41, 42, 49, 50, 51, 52, 53, 54, 55, 56, 60, 61, 63, 64, 65, 66, 70, 71},

41^{4, 6, 13, 14, 47, 59, 61, 67}

10. Zygotic chromosome number(s): $2n=72$ ⁵⁸,

c.80³⁶,

80^{13, 24, 25, 26, 30, 33, 34, 35, 36, 41, 42, 44, 47,50, 52, 53, 60, 63, 65, 66, 70},

82^{47, 67},

160²⁸,

123^{13, 14},

c.160⁴⁵,

164^{6, 61},

11. Gametic chromosome number(s): $n=36$ ⁵⁸,

40^{7, 8, 9, 10,11, 12, 13, 15, 16, 17, 18, 19, 20, 21, 22, 27, 30, 36, 37, 38, 39, 43, 44, 46, 47, 48, 49, 50, 51, 53, 54, 64, 65, 66, 71},

41⁶⁷,

45³¹,

80^{1, 7, 13, 15, 19, 20,21, 23, 28, 32, 38, 40, 47, 48, 49, 50, 61, 68, 69},

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

13. Ploidy level:Diploid (sexual) ^{4, 5, 7, 8, 9, 10,11, 12, 13, 15, 16, 17, 18, 19, 20, 21, 22, 24, 25, 26, 27, 30, 38, 39, 41, 42, 43, 44, 46, 47, 48, 49, 50,51, 52, 53, 54, 55,56, 58, 59, 60, 63, 64, 65, 66, 67, 70, 71} ,

Diploid (hybrid, sterile) ⁴⁷ ,

Triploid (apogamous)^{13, 14} ,

Tetraploid (sexual)^{1, 6, 7, 13, 15, 19, 20, 21, 23, 28, 32, 38, 40, 45, 47, 48, 49,50, 61, 68, 69} ,

Hexaploid (sexual)^{6, 28, 48, 49, 61}

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

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

16. Karyograms:

Meiosis:^{1, 4, 5, 6, 7, 8,9, 10,11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 28, 38, 37, 38, 40, 49, 50, 51, 53, 58, 60, 61, 64, 65, 66, 67, 68, 69, 71}

17. Banding pattern(s):

18. Physical mapping of chromosomes:

GISH:

20. Cytogenetic mechanism (s) underlying evolution:

21. Linkage map:

22. Any other information: