

Species Datasheet

Datasheet No. A-076.018.007
(family.genus.species)

DBT- Network Programme

1. Taxon:

Species *Phoenix rupicola* T.Anderson
Subspecies
Variety
Cultivar
Hybrid

Image file

2. Synonyms:

3. Systematic Position:

- APG IV (2016)
- Kingdom: Plantae
- Clade: Angiosperm
- Clade: Monocots
- Clade: Commelinids
- Order: Arecales Bromhead
- Family: Arecaceae Bercht. & J. Presl
- Genus: *Phoenix* L.
- Species: *P. rupicola* T.Anderson

Bentham and Hooker (1862)

Kingdom: Plantae
Division: Phanerogamia
Class: Monocotyledones
Series: Calycinae
Ordo: Palmae Juss.
Genus: *Phoenix* L.
Species: *P. rupicola* T.Anderson

4. Distribution:

Global: Bhutan, India and Nepal

India: Arunachal Pradesh, Assam, Sikkim and West Bengal

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

6. Threat Status:

IUCN: Lower Risk/near threatened

BSI:

7. Habit and Habitat: Tree. Wet forest or open areas on steep rocky slopes, ravines, cliffs at 500 – 1200 m elevation.

8. Life Form: Phanerophytes

9. Economic Importance: Stem pith is eaten uncooked, source of starch; fruits are edible.

10. Probable Progenitor of:

11. DNA

C- value

4C (6.01pg)³⁶

Methodology

Feulgen microdensitometry³⁶

12. Basic chromosome number(s):

13. Zygotic chromosome number(s): 2n=36^{31,36,37}

14. Gametic chromosome number(s): n=18³¹

15. Specialized chromosomes (B chromosomes/Sex chromosomes/Polytene chromosomes/Neocentric chromosomes): Presence of one heteromorphic pair of chromosomes (AA₁) in somatic cells of male plant and one heteromorphic pair during meiosis³¹

Image file

16. Ploidy level:

Image file

17. Agametoploidy

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

19. Genomic formula:

20. Aberrant chromosome number(s) (aneuploidy, aneusomy, polysomy): Somatic cells with abnormal chromosomes number of $2n=27$ ³¹, $2n=32$ ³¹

21. Somatic chromosomes:

Karyotype: Majority nearly metacentric to metacentric chromosomes³¹

Chromosome size: Very small to small³¹

NOR chromosome(s): 4 NOR³¹

Degree of asymmetry:

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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: 18 II³¹

Image file

27. Chromosome distribution at anaphase I:

28. Genetic diversity:

Chromosomal level

Image file

DNA level

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