Species Datasheet

Datasheet No. A-076.002.002
(family.genus.species)

DBT- Network Programme

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1. Taxon:

Species: *Areca triandra* Roxb. ex Buch.-Ham.
Subspecies
Variety
Cultivar
Hybrid
Commonly known as 'wild areca palm'.
Image file

2. Synonyms:

3. Systematic Position:

APG IV (2016)

- Kingdom: Plantae
- Clade: Angiosperm
- Clade: Monocot
- Clade: Commelinids
- Order: Arecales Bromhead
- Family: Arecaceae Bercht. & J. Presl
- Subfamily: Arecoideae Burnett
- Genus: *Areca* L.
- Species: *A. triandra* Roxb. ex Buch.-Ham.

Bentham and Hooker (1862)
Kingdom: Plantae
Division: Phanerogamia
Class: Monocotyledones
Series: Calycinae
Ordo: Palmae Juss.
Genus: *Areca* L.
Species: *A. triandra* Roxb. ex Buch.-Ham.

4. Distribution:

Global: Bangladesh, Borneo, Cambodia, China, Laos, India, Malaya, Malaysia, Myanmar, Philippines, Sumatera, Thailand, and Vietnam

India: Andaman and Nicobar Island, Assam, Northeastern India

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

6. Threat Status:

IUCN:

BSI:

7. Habit and Habitat: Slender, dwarf to bushy, evergreen palm, grows in forest margins and the undergrowth of seasonally flooded alluvial forest at low elevations

8. Life Form: Phanerophyte

9. Economic Importance: Used as a food and source of materials, sometimes grown as an ornamental plant

10. Probable Progenitor of:

11. DNA

C- value **Methodology**

12. Basic chromosome number(s):

13. Zygotic chromosome number(s): $2n = 32^{3, 5, 6, 15, 16, 17}$

14. Gametic chromosome number(s): $n = 16^{3, 5, 10, 16}$

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

Image file

16. Ploidy level:

Image file

17. Agametoploidy

18. Nature of polyploidy (auto, segmental, allo, autoallo): Autopolyploid[10]

19. Genomic formula:

20. Aberrant chromosome number(s) (aneuploidy, aneusomaty, polysomaty): Somatic cells with abnormal chromosomes number 2n=12[3]

21. Somatic chromosomes:

Karyotype Majority metacentric to submetacentric chromosomes[3, 6]

Chromosome size Very small to small[3]; Small to medium[6]

NOR chromosome(s) 6 NOR[3]

Degree of asymmetry: Symmetrical[6]

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 16II[3, 5, 10]; Occurrence of univalents, trivalents, quadrivalents[10]

Image file

27. Chromosome distribution at anaphase I: Regular[5]; Laggards[10]; Unequal separation of chromosomes[10]

28. Genetic diversity:

Chromosomal level

Image file

DNA level[14]

29. Any other information (Apomixis; Inversion; Male sterility; Pollen grain mitosis; Pollen stainability; Translocations etc): Pollen stainability = (33 to 75%)[10] **,** Ungerminated pollens = 38%[11] **,** Apomixis[18]