### Datasheet No. A-076.018.008 (family.genus.species)

1. Taxon:

Species *Phoenix sylvestris* (L.) Roxb. Subspecies Variety Cultivar Hybrid

Image file

2. Synonyms: Elate sylvestris L., E. versicolor Salisb.

## 3. Systematic Position:

- APG IV (2016)
- Kingdom Plantae
- Clade: Angiosperm
- Clade: Monocots
- Clade: CommelinidsOrder: Arecales Bromhead
- Family: Arecaceae Bercht. & J. Presl
- Failing: Alecaceae
  Genus: *Phoenix* L.
- Species: *P. sylvestris* (L.) Roxb.

### 4. Distribution:

Global: Bangladesh, Bhutan, India, Myanmar, Nepal and Pakistan

#### India: Throughout

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

6. Threat Status:

IUCN:

**BSI:** 

7. Habit and Habitat: Tree. Low elevations, disturbed plains, open grassy areas, adapted to various ecological conditions; often cultivated.

- 8. Life Form: Phanerophytes
- 9. Economic Importance: Fruits are eaten locally, also medicinally important; stems are tapped for sweet tap, source of jiggery, leaves are used for making brooms and basketry; stem cut into pieces and used as fuel; mature fruits are eaten.
- **10. Probable Progenitor of:**

11. DNA

C-value

12. Basic chromosome number(s):

**13. Zygotic chromosome number(s):** 2n=36 <sup>3,31,37</sup>

14. Gametic chromosome number(s): n=18 3,31

**15.** Specialized chromosomes (B chromosomes/Sex chromosomes/Polytene chromosomes/Neocentric chromosomes): Presence of one heteromorphic pair of chromosomes (AA<sub>1</sub>) in somatic cells of male plant and one heteromorphic pair during meiosis <sup>31</sup>

Image file

16. Ploidy level:

Image file

- 17. Agametoploidy
- 18. Nature of polyploidy (auto, segmental, allo, autoallo):
- 19. Genomic formula:

# Bentham and Hooker (1862)

Kingdom: Plantae Division: Phanerogamia Class: Monocotyledones Series: Calycinae Ordo: Palmae Juss. Genus: *Phoenix* L. Species: *P. sylvestris* (L.) Roxb.

Methodology

**DBT-** Network Programme

**20.** Aberrant chromosome number(s) (an uploidy, an usomaty, polysomaty): Somatic cells with abnormal chromosomes number 2n= 19 <sup>31</sup>, 2n=28 <sup>31</sup>, 2n=30 <sup>31</sup>

## 21. Somatic chromosomes:

Karyotype: Majority nearly metacentric to metacentric chromosomes <sup>31</sup>

Chromosome size: Very small<sup>31</sup>

NOR chromosome(s): 4 NOR <sup>31</sup>

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  $18 \amalg {}^{3,31}$ 

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; Translocations etc):