

Species Datasheet CalU+SUK-Phase I

Datasheet No. A-074.005.008
(family.genus.species)

DBT- Network Programme

1. Taxon:

Species: *Agave vera-cruz* Mill.

Subspecies

Variety

Cultivar

Hybrid

Image file

2. Synonyms: *Agave breviscapa* A.Berger ex Roster; *A. cyanophylla* Jacobi; *A. haworthiana* M.Roem.; *A. lepida* D.Dietr.; *A. lurida* Aiton; *A. magni* Desf.; *A. manguai* Desf.; *A. mexicana* Lam.; *A. polyphylla* K.Koch; *A. vera-crucis* Haw.; *A. verna* A.Berger

3. Systematic Position:

APG IV (2016)

- Kingdom: Plantae
- Clade: Angiosperms
- Clade: Monocots
- Order: Asparagales Link
- Family: Asparagaceae Juss.
- Subfamily: Agavoideae
- Genus: *Agave* L.
- Species: *A. vera-cruz* Mill.

Bentham and Hooker (1862)

Kingdom: Plantae
Division: Phanerogamia
Class: Monocotyledones
Series: Epigynae
Ordo: Amaryllideae
Tribus: Agaveae
Genus: *Agave* L.
Species: *A. vera-cruz* Mill.

4. Distribution:

Global: India, Nepal, Mexico; Pakistan; Runion; St. Helena; Thailand

India: Assam, Bihar, Bengal, Tamil Nadu, Maharashtra, Mysore, East Himalaya, Karnataka, Telangana; Sri Lanka

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

6. Threat Status:

IUCN:

BSI:

7. Habit and Habitat: Herb; wet places

8. Life Form:

9. Economic Importance: Leaves are a source of fiber; leave Juice is used in treating constipation in the folk medicine

10. Probable Progenitor of:

11. DNA

C- value

Methodology

12. Basic chromosome number(s):

13. Zygotic chromosome number(s): $2n = \sim 90^{24,30}$; $2n = 120^{13}$

14. Gametic chromosome number(s):

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

Image file

16. Ploidy level:

Image file

17. Agameteoploidy

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

19. Genomic formula:

20. Aberrant chromosome number(s) (aneuploidy, aneusomy, polysomy): Variant metaphase plate showing $2n = 100^{13}$

21. Somatic chromosomes:

Karyotype: Majority metacentric chromosomes¹³

Chromosome size: very small to medium¹³

NOR chromosome(s): 14NOR¹³

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

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):