

Species Datasheet

Datasheet No. A-403.051.001
(family.genus.species)

DBT- 1

1. Taxon:

Species: *Silybum marianum*(L.) Gaertn.

Subspecies

Variety

Cultivar

Hybrid

Image file

2. Synonyms: *Carduuslactifolius* Stokes, *C.mariae*Crantz, *C.marianus* L., *C.versicolor*Salisb., *Carthamusmaculatus* (Scop.) Lam., *Centaureadalmatica*Fraas, *Cirsiummaculatum*Scop., *Marianalactea* Hill, *M.mariana* (L.) Hill, *Silybummaculatum* (Scop.) Moench, *S.mariae* (Crantz) Gray, *S.marianum* var. *albiflorum*Eig, *S.marianum* var. *marianum*,*S.pygmaeum* Cass.

3. Systematic Position:

APG IV (2016)

- Kingdom: Plantae
- Clade: Angiosperms
- Clade: Eudicots
- Clade: Superasteride
- Clade: Asterids
- Order: Asterales Link
- Family: Asteraceae Bercht. & J. Presl
- Genus: *Silybum* Adans.
- Species: *S.marianum*(L.) Gaertn.

Bentham and Hooker (1862)

- Kingdom: Plantae
Division: Phanerogamia
Class: Dicotyledons
Subclass: Gamopetalae
Series: Inferae
Cohorts: Asterales Link
Ordo: CompositaeGiseke
Genus: *Silybum* Adans.
Species: *S.marianum*(L.) Gaertn.

4. Distribution:

Global: Argentina, Australia, Bolivia, Brazil, Canada, Chile, China, Colombia, Ecuador, Kenya, Mexico, New Zealand, Peru, South Africa, USA, Uruguay, Venezuela

India: North West Himalaya, North India, Nilgiris

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

6. Threat Status:

IUCN:

BSI:

7. Habit and Habitat:Herb.

8. Life Form:Chamaephytes

9. Economic Importance: Young Shoots are boiled and eaten during spring. Seed are roasted and used as substitute for coffee

10. Probable Progenitor of:

11. DNA

C-value

Methodology

12. Basic chromosome number(s): $x=17^1$

13. Zygotic chromosome number(s): $2n=34^{1-9}$

14. Gametic chromosome number(s): $n=17^{10}$

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):

19. Genomic formula:

20. Aberrant chromosome number(s) (aneuploidy, aneusomy, polysomy):

21. Somatic chromosomes: 1,2,3

Karyotype Metacentric/submetacentric chromosomes

Chromosome size

NOR chromosome(s)2

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^{2,3}

Image file

DNA level¹¹⁻¹³

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