

Species Datasheet

Datasheet No. A-140.081.001
(family.genus.species)

DBT- Network Programme

1. Taxon:

Species: *Melilotus albus* Medik.

Subspecies

Variety

Cultivar

Hybrid

Image file

2. Synonyms:

- [*Melilotus alba* Medik.](#)
- [*Melilotus albus* f. *albus*](#)
- [*Melilotus albus* var. *annua* Coe](#)
- [*Melilotus argutus* Rehb.](#)
- [*Melilotus leucanthus* DC.](#)
- [*Melilotus melanospermus* Ser.](#)
- [*Melilotus vulgaris* Willd.](#)

3. Systematic position: APG; Bentham and Hooker:

APG IV (2016)

- Kingdom: Plantae
- Clade: Angiosperms
- Clade: Eudicots
- Clade: Rosids
- Order: Fabales
- Family: Fabaceae
- Subfamily: Faboideae
- Genus: *Melilotus* Mill.
- Species: *Melilotus albus* Medik.

4. Distribution:

Global: Australia, China, Americas.

India

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

6. Threat Status:

IUCN

BSI

Bentham and Hooker (1862)

Kingdom: Plantae

Division: Phanerogamia

Class: Dicotyledones

Subclass: Polypetalae

7. Habit and Habitat: Weed growing in limestone glades, thick wooded bluffs, prairies, weedy meadows, old fields, vacant lots, areas along

railroads and roadsides, and waste areas

Series: Calyciflorae
Cohors: Rosales Bercht. & J. Presl
Ordo: Leguminosae Juss.
Subordo: Papilionaceae Giseke
Genus: *Melilotus* Mill.
Species: *Melilotus albus* Medik.

8. Life Form: Biennial or annual

9. Economic Importance:

10. Probable Progenitor of:

11. DNA

C-value Methodology

2C DNA: 2.47 pg¹ Flow cytometry¹

12. Basic chromosome number(s): $x=8^{2,3}$

13. Zygotic chromosome number(s): $2n=16^{2-14}$

14. Gametic chromosome number(s): $n=8^{3,7,15,16}$

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

Image file

16. Ploidy level: Diploid²⁻¹⁴

Image file

17. Agamete ploidy:

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

19. Genomic formula:

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

21. Somatic chromosomes: 2, 14

Karyotype: majority metacentric/sub-metacentric

Chromosome size: long/medium

NOR chromosome(s): 2-4

Degree of asymmetry: symmetrical

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 level²

DNA level^{17, 18}

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