

Final Species Datasheet JamU+CalU+SUK-Phase I

Datasheet No. A-416.009.010
(family.genus.species)

DBT- Network Programme

1. Taxon:

Species: *Bupleurum falcatum* L.

Subspecies

Variety

Cultivar

Hybrid

Image file

2. Synonyms: *Bupleurum antiochium* Post, *B. corsicum* Coss. & Kralik, *B. dilatatum* Schur, *B. flexuosum* Moench, *B. falcatum* var. *falcatum*, *B. falcatum* var. *biharensis* Haines, *B. oppositifolium* Lapeyr., *B. parnassicum* Halácsy, *B. petiolare* Lapeyr., *B. petrogenes* Jord. ex Nyman, *B. rossicum* (Koso-Pol.) Woronow, *B. sibthorpiianum* Sm., *B. souliaei* Calest., *B. woronowii* Manden., *Isophyllum falcatum* Hoffm., *Selinum bupleurum* E.H.L. Krause, *Tenoria falcata* Bubani

3. Systematic Position:

APG IV (2016)

- Kingdom: Plantae
- Clade: Angiosperms
- Clade: Eudicot
- Clade: Asterids
- Clade: Campanulids
- Order: Apiales Nakai
- Family: Apiaceae Lindl.
- Genus: *Bupleurum* L.
- Species: *B. falcatum* L.

Bentham and Hooker (1862)

- Kingdom: Plantae
- Division: Phanerogamia
- Class: Dicotyledons
- Subclass: Polypetalae
- Series: Calyciflorae
- Cohors: Umbellales
- Ordo: Umbelliferae Juss.
- Genus: *Bupleurum* L.
- Species: *B. falcatum* L.

4. Distribution:

Global: Albania, Austria, Belgium, Bulgaria, Central Corse, Czechoslovakia, France, Germany, Great Britain, Hungary, Italy, Krym, North Caucasus, Poland, Romania, South European Russia, Switzerland, Switzerland, Ukraine, Yugoslavia, Myanmar

India: Himalaya, North East India, South India

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

6. Threat Status:

IUCN

BSI

7. Habit and Habitat: Herb

8. Life Form:Hemicryptophyte

9. Economic Importance:

10. Probable Progenitor of:

11. DNA

C-value

4C (11.418 ±0.002 pg)²

Methodology

Feulgen cytophoto-densitometry²

12. Basic chromosome number(s):

13. Zygotic chromosome number(s):2n=12⁹;2n=16^{2,8}

14. Gametic chromosome number(s):n=8^{4,7}

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

Image file

16. Ploidy level:Diploid⁷

Image file

17. Agametoploidy:

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

19. Genomic formula:

20. Aberrant chromosome number(s) (aneuploidy, aneusomaty, polysomaty):Aneuploidal variations in somatic cells with 2n=19, 2n=20, 2n=21, 2n=25, 2n=26¹⁰

21. Somatic chromosomes:

Karyotype: Majority metacentric chromosomes²

Chromosome size: 21.7±0.06µm²

NOR chromosome(s): 4NOR²

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 level¹¹

29. Any other information (Apomixis; Inversion; Male sterility; Pollen grain mitosis; Pollen stainability; Translocation etc): Pollen fertility = 100%⁷