

# Genus Datasheet JamU+CalU+SUK-Phase I

Datasheet No. A-416.009

(Family.Genus)

DBT- Network Programme

1. Genus: *Bupleurum* L.

2. Systematic position:

APG IV (2016)

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

Bentham and Hooker (1862)

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

3. Species:

Global: 209

India: 33

4. Taxonomic riddles:

5. Distribution:

**Global:** Afghanistan, Alaska, Albania, Algeria, Altay, Amur, Austria, Azores, Balears, Baltic States, Belarus, Belgium, British Columbia, Bulgaria, Buryatiya, Canary Island, Cape Provinces, China, Chita, Colorado, Corse, Cyprus, Czechoslovakia, Denmark, Djibouti, East Aegean Island, East European Russia, East Himalaya, Egypt, France, Free State, Germany, Great Britain, Greece, Hungary, Idaho, India, Inner Mongolia, Iran, Iraq, Irkutsk, Italy, Japan, Kamchatka, Kazakhstan, Khabarovsk, Kirgizstan, Korea, Krasnoyarsk, Kriti, Krym, Kuril Island, Kuwait, KwaZulu-Natal, Lebanon-Syria, Lesotho, Libya, Madeira, Magadan, Manchuria, Mongolia, Montana, Morocco, Myanmar, Nepal, Netherlands Antilles, New Mexico, North Caucasus, North European Russia, Northern Provinces, Northwest Territorie, Pakistan, Palestine, Poland, Portugal, Primorye, Qinghai, Romania, Sakhalin, Sardegna, Saudi Arabia, Sicilia, Sinai, Spain, Sri Lanka, Swaziland, Sweden, Switzerland, Switzerland, Tadzhikistan, Taiwan, Tibet, Transcaucasus, Transcaucasus, Tunisia, Turkey, Turkey-in-Europe, Turkmenistan, Tuva, Ukraine, Uzbekistan, Vietnam, West Himalaya, West Siberia, Western Sahara, Wyoming, Xinjiang, Yakutskiya, Yugoslavia, Yukon

**India:** Assam, Himalaya, Peninsular India

6. Habit and Habitat: Herb

7. Economic Importance:

8. DNA content range:

4C (11.225- 12.276 pg)<sup>2</sup>

Methodology

Feulgen cytophoto-densitometry<sup>2</sup>

**9. Basic chromosome number(s):**

**10. Zygotic chromosome number(s):**  $2n=12^{6,8,9,14,18}$ ;  $2n=14^{1,3,8,15}$ ;  $2n=16^{2,3,5,6,8,14,16}$ ;  $2n=24$

**11. Gametic chromosome number(s):**  $n=6^{7,12,16,18}$ ;  $n=7^{14,15}$ ;  $n=8^{4,5,7,12,17,21}$ ;  $n=14^{20}$ ;  $n=6^{13}$

**12. Specialized chromosomes (B chromosomes/Sex chromosomes/Polytene Chromosomes/Neocentric chromosomes):**

**13. Ploidy level:** Diploid<sup>7</sup>

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

**15. Aberrant chromosome number(s) (aneuploidy, aneusomaty, polysomaty):** Aneuploidic somatic cells with  $2n=19$ ,  $2n=20$ ,  $2n=21$ ,  $2n=25$ ,  $2n=26$ <sup>10</sup>

**16. Karyograms:**<sup>2</sup> Meiosis:<sup>7</sup>

**17. Banding pattern(s):**

**18. Physical mapping of chromosomes:** GISH:

**19. Phylogenetic relationship at Chromosomal; DNA level:**

**20. Cytogenetic mechanism (s) underlying evolution:**

**21. Linkage map:**

**22. Any other information:** Total number of species with reports = 20/33