

Datasheet No. A-061.047
(Family: Genus)

DBT- Network Programme

1. Genus: *Dactylorhiza* Neck. ex Nevski

Bentham and Hooker

Kingdom: Plantae

Division: Phanerogamia

Class: Monocotyledonae

Series: Microspermae

Ordo: Orchideae

Tribus: Ophrydeae

Genus: *Orchis* Tourn. ex L.

2. Systematic Position:

APG IV

- Kingdom: Plantae
- Clade: Angiosperms
- Clade: Monocots
- Order: Asparagales Link.
- Family: Orchidaceae Juss.
- Subfamily: Orchidoideae
- Tribe: Orchideae
- Subtribe: Orchidinae
- Genus: *Dactylorhiza* Neck. ex Nevski

3. Species:

Global: 28

India: 4

4. Taxonomic riddles: ⁷

5. Distribution:

Global: Afghanistan, Alaska, Albania, Alberta, Aleutian Is., Algeria, Altay, Amur, Austria, Baltic States, Belarus, Belgium, British Columbia, Bulgaria, Buryatiya, Central European Rus, China North-Central, China South-Central, China Southeast, Chita, Colorado, Connecticut, Corse, Cyprus, Czechoslovakia,

Denmark, East Aegean Is., East European Russia, East Hir
 France, Føroyar, Germany, Great Britain, Greece, Hungary,
 Illinois, Indiana, Inner Mongolia, Iowa, Iran, Iraq, Ireland, Irku
 Kamchatka, Kazakhstan, Khabarovsk, Kirgizstan, Korea, Kr
 Krym, Kuril Is., Labrador, Lebanon-Syria, Madeira, M
 Manchuria, Manitoba, Maryland, Massachusetts, Michig
 Missouri, Mongolia, Montana, Morocco, Nebraska, Nepal, N
 Brunswick, New Hampshire, New Jersey, New Mexic
 Newfoundland, North Carolina, North Caucasus, North
 European Russi, Northwest European R, Northwest Territorie
 Scotia, Ohio, Ontario, Pakistan, Palestine, Pennsylvania, P
 Primorye, Prince Edward I., Qinghai, Québec, Rhode I., Roi
 Sardegna, Saskatchewan, Sicilia, South Dakota, South Europe
 Sweden, Switzerland, Tadzhikistan, Taiwan, Tennessee, Tibet
 Tunisia, Turkey, Turkey-in-Europe, Turkmenistan, Tuva,
 Uzbekistan, Vermont, Virginia, Washington, West Himalaya, W
 Virginia, Wisconsin, Wyoming, Xinjiang, Yakutskiya, Yugoslav

India: Sikkim, Himachal Pradesh, Uttarakhand, Jammu and Kashmir.

6. Habit and Habitat: Terrestrial herbs

7. Economic Importance:

8. DNA content range:

Methodology

9. Basic chromosome number(s): $x=20$ 1, 2, 3, 4, 5, 6, 8, 9, 10, 11, 12, 13, 14, 15, 17, 18, 19, 2
 24, 25, 26, 27, 28, 29, 31, 32, 33, 36, 37, 40, 41, 42, 43, 44, 45. 47, 48

$2n$ 6, 22, 34, 35, 46

10. Zygotic chromosome number(s): $2n=40$ 1, 2, 3, 4, 5, 6, 8, 9, 10, 11, 12, 13, 14, 15, 17, 18, 1
 23, 24, 25, 26, 27, 28, 29, 31, 32, 33, 36, 37, 40, 41, 43, 44, 42, 45, 47, 48

$4n$ 6, 22

11. Gametic chromosome number(s): $n=20^{19, 20, 31, 32}, 21^{34, 35, 46}, 40^{32, 46}, 42^{39}$

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

13. Ploidy level Diploid $1, 2, 3, 4, 6, 5, 8, 9, 10, 11, 12, 13, 14, 15, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 34, 35, 36, 37, 40, 41, 42, 43, 44, 45, 46, 47, 48$

Triploid $14, 18$

Tetraploid $20, 30, 31, 32, 37, 39, 46$

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

15. Aberrant chromosome number(s) (aneuploidy, aneusomaty, polysomaty):

16. Karyograms:

Meiosis: $19, 20, 31, 32, 35, 46$

17. Banding pattern(s):

18. Physical mapping of chromosomes:

GISH:

Bateman RM, Hollingsworth PM, Preston J, Yi Bao L, Pridgeon AM, Chase MW 2003 Molecular evolution and evolution of Orchidaceae and selected Habenariaceae (Orchidaceae) Botanical Journal of Linnean Society 142: 1-40

20. Cytogenetic mechanism (s) underlying evolution:

21. Linkage map:

22. Any other information: