

# Genus Data sheet

Datasheet No. A-078.012  
(Family.Genus)

DBT- Network Programme

1. Genus: *Cyanotis* D. Don.

## 2. Systematic position:

### APG IV (2016)

- Kingdom: Plantae
- Clade: Angiosperms
- Clade: Monocots
- Clade: Commelinids
- Order: Commelinales Mirb. ex Bercht. & J. Presl
- Family: Commelinaceae Mirb.
- Genus: *Cyanotis* D. Don.

### Bentham and Hooker (1862)

Kingdom: Plantae  
Division: Phanerogamia  
Class: Monocotyledones  
Series: Coronarieae  
Ordo: Commelinaceae Mirb.  
Genus: *Cyanotis* D. Don

## 3. Species:

Global: 52

India: 15

## 4. Taxonomic riddles:

## 5. Distribution:

Global: Tropical & Subtropical Old World

India: Peninsular India, North East India

6. Habit and Habitat: Herb. Found in rocky crevices, grassland slopes

7. Economic Importance: Medicinal

## 8. DNA content range:

2C

4C

## Methodology

9. Basic chromosome number(s):  $x=4^{5,15}5^{15}8^1 10^1 12^1$

**10. Zygotic chromosome number(s):**  $2n=16^{1,11}20^{1,2,3,4,5,6,9,12,14,15,19,21,24,33,34}22^{2,7,8,14,21}24^{9,10,11,13,14,15,16,17,18,19,20,21,22,25,26,27,28,29,31,35,36}26^{8,28}34^{32}48^{2,3,4,14,26,72}2,3,4$

**11. Gametic chromosome number(s):**  $n=8^{4,6}10^{1,4,5,6,9,15,19,37,38}12^{1,2,3,5,6,8,10,11,12,15,16,19,22,23,24,25,30,35}13^{8,10,15,16,25,26}36^{3,24,25}$

**12. Specialized chromosomes (B chromosomes/Sex chromosomes/Polytene Chromosomes/ Neocentric chromosomes):** (B-chromosome:  $24+0-1B$ )<sup>31</sup>

**13. Ploidy level:** Diploid<sup>1,4,5,6,9,15,19,25,26,33,34</sup> Hexaploid<sup>3</sup>

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

**15. Aberrant chromosome number(s) (aneuploidy, aneusomaty, polysomaty):** Aneuploidy<sup>8,21</sup> fragment<sup>27</sup>

**16. Karyograms:**

**Meiosis:**

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

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

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

**20. Cytogenetic mechanism (s) underlying evolution:** Translocations<sup>1</sup>, Pericentric Inversions<sup>1</sup> fusions<sup>1,25</sup>; Hyper-aneuploidy<sup>10,14,26</sup>; Intraspecific aneuploidy<sup>26</sup>; Dysploidy<sup>25</sup>

**22. Any other information:**