

## Genus Datasheet

Datasheet No. G-011.005

(Family.Genus)

DBT- Network Programme

1. **Genus:** *Cunninghamia* R. Br. ex A. Rich.

### 2. Systematic Position:

**Christenhusz *et al.* (2011)**

- Class: Equisetopsida C. Agardh
- Subclass: Pinidae Cronquist
- Order: Cupressales Link
- Family: Cupressaceae Gray
- Genus: *Cunninghamia* R. Br. ex A. Rich.

**Bentham and Hooker (1862)**

Kingdom: Plantae  
Division: Phanerogamia  
Class: Gymnospermeae  
Ordo: Coniferae

### 3. Species:

**Global:** 2

**India:** 1

### 4. Taxonomic riddles:<sup>20</sup>

### 5. Distribution:

**Global:** China, Vietnam, Laos, perhaps Cambodia; widely introduced in Japan, and widely planted throughout China

**India:** Sikkim (Gangtok), Tamil Nadu, Uttarakhand (Dehradun)

**6. Habit and Habitat:** Evergreen tree (50 m tall), Grows in mixed mesophytic forest formation of warm temperate regions of China

**7. Economic Importance:** It is an attractive tree suitable for land scape, the wood is light, soft, fragrant, almost white, and durable. Large sizes are milled for construction timber in houses, for masts, carpentry and planks for coffins. Wood is termite proof; easily workable, used in building, construction of bridges, ships, lamp post, making furniture and for wood fibre.

### 8. DNA content range:

### Methodology

2C (27.12 pg) <sup>14</sup>Feulgen microdensitometry<sup>14</sup>

2C (25.5-28.34 pg) <sup>6, 19</sup>

Flow cytometry<sup>6, 19</sup>

2C (39.60 pg) <sup>19</sup>

Flow cytometry<sup>19</sup>

**9. Basic chromosome number(s):** $x=11$  <sup>1, 2, 3, 4, 5, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 22, 23, 24, 25</sup>

**10. Zygotic chromosome number(s):** $2n=22$  <sup>1, 2, 3, 4, 7, 8, 10, 11, 12, 13, 14, 15, 16, 17, 23, 24</sup>

**1. Gametic chromosome number(s):** $n=11$  <sup>5, 22, 25</sup>

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

**13. Ploidy level:**Diploid<sup>1, 2, 3, 4, 5, 7, 8, 10, 11, 12, 13, 14, 15, 16, 17,</sup>

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

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

**16. Karyograms:** <sup>1, 2, 3, 4, 7, 8, 10, 11, 12, 13, 14, 15, 16, 17</sup>

**Meiosis:**<sup>5</sup>

**17. Banding pattern(s):**C bands<sup>11</sup>, G bands<sup>15</sup>, HSAG<sup>16</sup>, CMA+<sup>21</sup>

**19. Phylogenetic relationship at Chromosomal; DNA level:**<sup>3, 12, 18</sup>

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

**21. Linkage map:**

**22. Any other information:**