

“CHROMOSOME NUMBERS AND ABNORMAL MALE MEIOSIS IN SIX SPECIES OF CAMPANULACEAE FROM NORTHWESTERN HIMALAYAS”

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ABSTRACT

The present paper reveals meiotic analysis on 12 populations comprising 6 species belonging to 3 genera of the family Campanulaceae from various localities of Northwest Himalayas. The chromosome number has been reported for the first time in *Campanula aristata* ($2n=32$). Besides, there are first ever reports of tetraploid cytotypes in *Codonopsis rotundifolia* ($2n=32$) and *Cyananthus lobatus* ($2n=28$). 0-2B chromosomes have been reported for the first time in *Campanula cashmeriana*. Most of the populations show laggards, chromosome stickiness and cytomixis from early prophase to telophase-II, leading to the formation of aneuploid cells or meiocytes with double the normal chromosome number. Such meiotic abnormalities produce unreduced pollen grains and the reduce pollen viability.

KEYWORDS: Campanulaceae, Chromosome Number, Meiotic Abnormalities, Northwest Himalayas