COMPARATIVE ACCOUNT OF MORPHOLOGICAL AND KARYOTYPIC STUDIES IN THREE CULTIVARS OF MULBERRY (MORUS SPP.)

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ABSTRACT

Three mulberry genotypes namely, Kajali, S₅₄ and Thailand were analysed for morphological and karyotypic attributes. Kajali and S₅₄ are diploid with 2n=28 and Thailand is triploid with 2n=42 somatic chromosome numbers. Somatic chromosome length ranges from 1.46 to 3.06 μm whereas arm ratio ranges from 1.49 to 2.36 μm. Stomatal frequency is less in triploid variety when compared to diploid mulberry varieties. Three to four types of chromosomes have been observed irrespective of varieties. Chromosomes are small with a narrow range of variation in length.

Key words: Diploids, karyotype analysis, mitosis, morphology, mulberry (Morus spp.), triploid.