TRANSLOCATION HETEROZYGOSITY IN ALOE VERA (L.) BURM. F.

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Received-15.09.2016, Revised-24.09.2016

Abstract: A population of *Aloe vera* (L.) Burm. F. (a diploid species with 2n=14 chromosomes), from village Kiharian District Jammu, J&K State (India) was studied for reduction division in male track. Of the 16 plants studied, pollen mother cells of 15 plants showed normal chromosome behavior at diakinesis and metaphase I and equal separation of chromosomes at anaphase I. Pollen viability of these plants averaged 76%. Meiosis in the remainder plant is characterized by the presence of 22% cells with multivalents at diakinesis and equal anaphasic segregations. The pollen viability of this cytotype was low (58.5%). As normal diploids and the translocation heterozygote did not show fruit and seed formation, it indicates that apart from anomalous chromosome behaviour, some other factors are also adversely affecting the reproductive potential of *A. vera*.

Keywords: *Aloe vera*, Multivalent formation, Chiasma frequency

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Journal of Plant Development Sciences Vol. 8 (9): 431-433. 2016