

**Research Article****Identification of Various Reservoirs of Begomoviruses in Punjab****S I Kaur, S S Kang and A Sharma**

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**Abstract**

During the last two decades, begomoviruses have emerged as major constraints to the cultivation of a variety of crops especially the fibre and vegetable crops. As these viruses are neither seed transmitted nor propagative, so in the absence of the main crop, the virus inoculum must survive on some alternate host. With an objective to identify alternate hosts of begomoviruses, the present studies were conducted where the symptomatic and asymptomatic plants growing around the cotton fields were collected to identify the source of inoculum of the begomoviruses causing leaf curl disease of cotton in Punjab. The collected samples included 49 plant species consisting of 27 weed species, 10 ornamental plants and 12 vegetable crops belonging to different families. The DNA from the collected samples was isolated using CTAB method and was then tested by polymerase chain reaction (PCR) using universal degenerate primers (Deng A and Deng B). Out of all the species tested, 20 weeds, 6 ornamental and 7 vegetable crops showed the presence of begomoviruses. The future studies on the strain variability of begomoviruses are needed for understanding the relationship among begomoviruses infecting different hosts and to evolve efficient management strategies of the diseases caused by these viruses.

**Key words:** Begomovirus, cotton leaf curl, PCR

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