NATURAL INCIDENCE AND HOST RANGE OF PEANUT BUD NECROSIS VIRUS (PBNV) INFECTING GROUNDNUT (ARACHIS HYPOGEA L.)

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ABSTRACT: Preliminary survey was carried out during rabi 2005-2006 in Allahabad and surrounding villages where the groundnut is prominently grown, to study the natural incidence in the farmer's fields. The disease was found to be in the range of 0 to 16.66%. The cultivated variety chitra was found to be more prone to the virus with percentage disease of 16.66 followed by type-64 with 8.33 and chandra 7.14. The early sown crop in August was found to be more prone to virus than the September sown crop. The surveyed fields which are surrounded by arhar- tomato and arhar-potato were found to have more incidence. Megalurothrips usitatus Franklienella schultzi were recorded in all the groundnut fields surveyed and the dominant being the Megalurothrips usitatus, the fields having more no. of Elusina indica, Dactylopium egyptium and Parthenium hysterophorus were found to have more infected plants. All glass house inoculated cultivated plants like potato, tomato, brinjal, pea, chilies, mustard, soya bean, mungbean urdbean and cowpea showed characteristic symptoms. The prominent weed flora of the region viz., Acanthospermum hispidium, Ageratum conyzoides,, Lagasca mollis, Tridax procumbens,, Cassia tora, Parthenium hysterophorus, Physalis floridana and Celosia argentea were also tested under glass house for host range, Ageratun conyzoides, Lagasca mollis, Chenopodium quinoa and Gompherina globosa showed characteristic symptoms.

Key Words: Groundnut, Peanut Bud Necrosis Virus (PBNV), natural incidence, host range.