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FARMERS' PARTICIPATORY INTEGRATED MANAGEMENT OF PEANUT BUD NECROSIS DISEASE OF MUNGBEAN (*VIGNA RADIATA* L. WILCZEK)

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Peanut bud necrosis virus (PBNV) is one of the important virus diseases of mungbean in Andhra Pradesh State, India. PBNV when occurs during early stages of crop growth results in substantial yield losses. In severe cases of disease occurrence total yield losses are not uncommon. Mungbean being short duration (70 - 75 days) crop with marginal profits, many farmers do not adopt chemical methods. On station experiments on integrated virus disease management (IVDM) at Hyderabad, India clearly demonstrated the effectiveness of an IPM module. The module consisted of a border crop with sorghum around the mungbean crop raised after an insecticide seed treatment and one insecticide spraying resulted in higher economic returns. Five farmers from Warangal district of Andhra Pradesh State conducted the trials under supervision during Monsoon 2002 with local agronomic package of practices. The trials were undertaken under both high disease pressure i.e., farmers' traditional practice of non-integrated virus disease management (non-IVDM) and low disease pressure i.e., integrated virus disease management (IVDM). The IVDM consisted of a 11-row border crop of sorghum around the mungbean raised after imidacloprid seed treatment @ 3g/Kg seed and one imidacloprid spray (0.008%) at 30 days after sowing. The occurrence of PBNV in IVDM was significantly lower (7.36 - 21.26%) than the non-IVDM (44.78 - 93.08%). The increase in yield over the non-IVDM varied from 64.72 to 367.67%.

The trials undertaken in the farmers, participatory demonstrations convinced many other local farmers about the effectiveness of IVDM in managing the PBNV disease resulting in higher economic returns. The farmers showed keen interest to adopt the technology during the forthcoming crop seasons.