

Effect of different types of cuttings on rooting, establishment and early growth of pepper (*Piper nigrum* L.)

Pepper is propagated through rooting of stem cuttings. Plant establishment and branching appears to be determined by type of stem cuttings. A study was conducted to evaluate the effect of different types of stem cuttings on plant establishment and early growth at the Research Station, Department of Export Agriculture, Matale during July-December 1999. The cutting types used were small and large cuttings from both ground runner branches and upright orthotropic branches. These were compared with single node cuttings rooted in soil heap. Cuttings were obtained from two varieties namely Panniyur-I and GK-49.

The large upright cuttings had a greater leaf area, and root and stem dry weights. This promoted better survival rate and growth at the nursery stage. This advantage was followed through to field establishment and development of the canopy.

The establishment of the plants obtained from cuttings of Panniyur-I was greater than that of local selection GK-49. Panniyur-I plants obtained from large upright cuttings showed better plant establishment than that of GK-49. Plants obtained from the large upright cuttings develop lateral plagiotropic branches from the very base of the developing vine, and thus are capable of producing inflorescence five months after field planting.

This study illustrated the potential of using large upright orthotropic branches as planting material for propagation of pepper which resulted in better plant establishment and early development of the canopy.