B-16: Effects of pre-mature harvesting on subsequent flowering and fruiting in pepper, *Piper nigrum* L.

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A study was carried out to investigate the relationship between early crop removal on flowering and fruiting in pepper at the Research Station, Matale during 1993-1997. A 10-year-old pepper block consisting of cultivars Panniyur-I, Kuchin and Local selections (PnM-1) was used for the study. The vines were blocked on the basis of number of lateral branches. The pre-mature harvesting at 16, 18, 20, 24, 26 and 28 weeks after peak spike emergence, 80% of flowering were during April-July, 1995 on completely randomized design having single plant plots. Spike emergence taking place in December 1995 and yield of 1996 were monitored.

It was observed that spike emergence is not affected by pre-mature harvesting. However, yield of Panniyur-I showed some response to immature harvesting. The highest yield of 3.61 kg/vine dry basis was observed when harvested at 18 weeks after peak spike emergence while harvesting at 28 weeks showed the lowest yield of 0.99kg/vine dry basis ($p \leq 0.05$). No statistically significant difference was observed within the yield data for harvests at 16, 18, 20, 24 and 26 weeks of maturity. No such response was observed in the other 2 cultivars tested.

This study indicated that the early removal of berries has no influence on flower induction in the cultivars tested. However, cultivar Panniyur-I showed 212% yield increase on the previous year's crop harvested at 20 weeks after peak spike emergence. This shows that the pre-mature spike removal has an effect on berry development on the following year crop but not on flowering.