

Effect of bee pollination on yield of coriander, *Coriandrum sativum* Linnaeus

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ABSTRACT

Among different flower visitors of coriander, *Apis florea* was the predominant visitor followed by *A. dorsata* and *A. cerana*. The activity of flower visitors were more at 11 00 h followed by at 10 00 h. Among different bee species, the activity of *A. florea* was reported from 09 00 to 12 00 h and from 16 00 to 18 00 h with maximum activity at 10 00 h. The activity of *A. dorsata* was observed from 09 00 h to 12 00 h and from 15 00 h to 18 00 h with maximum activity at 11 00 h. The studies on the effect of bee pollination on yield of coriander was undertaken at Spices Research Station, College Farm, Navsari Agricultural University, Navsari during *Rabi* 2010-11 by confining *A. cerana* bees in plots of coriander variety DH 5 in cage condition *i.e.* Bee pollination (BP) which was compared with open pollination (OP) and pollination without insects (PWI). The number of filled seeds/umbel was significantly higher in BP (54.03) followed by OP (49.62) and lowest in PWI (27.40). The per cent seed set was significantly higher in BP (69.51 %) followed by OP (62.21 %) and minimum in PWI (54.89 %). Highest yield was obtained in BP (14.57 q/ha) which was at par with OP (14.26 q/ha) but significantly higher than PWI (11.66 q/ha). The 1000 seed weight was also highest in BP (5.68 g) which was statistically at par with OP (5.28 g) but significantly higher than PWI (4.09 g). The germination per cent of seed was also significantly higher in BP (75.91 %) which was followed by OP (73.09 %) and the lowest in PWI (62.76 %). The results indicated that bees have significant role in enhancing yield and quality in terms of seed weight and germination percentage of coriander.

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