



## Qualitative Decline of Pollinator Spectrum in Sunflower Agro Ecosystem

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**Abstract:** Sunflower witnessed 30 per cent loss of floral visitors over 23 years. Majority (85%) of floral visitors in 1992 were pollinators than in 2015 (57.1%). Hymenoptera lost its dominant proportion from 60 per cent to mere 28.6 per cent and lost entire taxa of solitary and bumble bees. Despite increased density, *Apis mellifera* declined from 60.7 to 23.9 per cent followed by *A. dorsata*. Over this period, qualitative composition of floral visitors deteriorated, as non-pollinator species doubled from 3 to 6. Proportion of pestiferous fauna increased to 47.5 per cent from only 2.8 per cent in 1992. Weather conditions did not significantly varied during the period of 23 years to influence the decline in pollinators. One of the key factors in decline is the use of insecticides for management of new emerging pests.

**Keywords:** Sunflower, Floral visitors, Pollinators, Honey bees, Pollinator decline, Diversity, Abundance

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