

Efficiency of the different monitoring methods for pollinator diversity in the forest ecosystems of the southern Punjab Pakistan

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We examined the efficiency of different monitoring methods for assessing pollinator diversity in different forest ecosystem of the Southern Punjab Pakistan. These forest ecosystems were selected from four different ecological zones of Pakistan i.e. Central Agriculture Zone, Sandy Desert Zone, Indus River Delta and Dry Mountainous Zone. Color Pan Trap (Yellow, Blue & White color traps), Malaise Trap and hand net methods were used for this experiment. Fortnightly data was taken from each location. Sampling pollinator abundance by using hand net was done from the same field where fifteen pan traps (Five from each color) and one malaise trap were installed. Results showed statistically significant differences among three monitoring methods. Pollinator abundance was found to be greater in hand net sampling followed by pan traps and malaise traps. However with in a pan tarps proved more efficient with greater pollinator abundance compared to other two color pan tarps. Among the different ecological zones pollinator abundance was found to be comparatively higher in Central agriculture zone (1805) followed by Indus delta plan (1675), Sandy desert zone (1445) and Dry mountainous zone with (1370). While Hymenoptera proved most abundance insect order among the sampled pollinator followed Diptera and Lepidoptera.

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