

Preliminary Test of Agri-Environmental Scheme Implementation in Farmland in Northern Slope of Mount Slamet

Title	Preliminary Test of Agri-Environmental Scheme Implementation in Farmland in Northern Slope of Mount Slamet
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Abstract	<p>An Agri-Environmental Scheme (AES) was designed to enhance flower availability in crops using local wild plants. The goals of this research were to determine the impact of four wild plants on three cash crops, focusing on the diversity and abundance of insect pollinators, and to test the efficacy of this scheme using farmland on the northern slope of Mount Slamet. This research was done using a split block design, with the three cash crops as blocks (strawberry [Fragaria x ananassa Duchesne], chili pepper [Capsicum spp.], and tomatoes [Solanum lycopersicum L.]) and four wild plant species as treatments (Cleome rutidosperma, Borreria laevicaulis, Euphorbia heterophylla, and Tridax procumbens) at different percentages (0, 5, 10, and 15 %) of cash crop plant density. The results show that growing wild plants with cash crops enhanced the abundance and diversity of insect pollinators. Moreover, the addition of wild plant species to the crops at four densities had significantly different effects on insect pollinators in terms of abundance and diversity. The combination of 15 % C. rutidospermae and tomatoes had the largest population of insect pollinators. From the experiments it concluded that an AES could be implemented in farmland on the northern slope of Mount Slamet.</p>
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