

Agriculture practices supporting biodiversity conservation in Israel: A meta-analysis

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Farmlands can play an important role in supporting biodiversity conservation. The aim of this study is to identify wildlife-friendly farming practices, which may be incorporated into Israeli farms, given the local climate, biodiversity, and the prevalent agricultural branches. We focused on identifying scientific evidence for the contribution of various agricultural practices - considering the fragile economic condition of Israel's agricultural sector. An additional aim is to identify knowledge gaps and directions for future research.

A meta-analysis of 110 Mediterranean studies was conducted (including 17 carried out in Israel), and included quantitative evaluation of the influence of agricultural practices on the conservation of various taxonomic groups. 17 biodiversity-supporting agricultural practices were identified.

The practices found to contribute to conservation in the largest number of studies are conserving natural patches in agricultural areas and cover crops. 34% of the studies dealt with bird conservation in farms (none of them in Israel), while only 3% dealt with reptiles and amphibians. Only 2% of the studies dealt with vegetables farms, whereas vegetables comprise 14% of the farming sector in Israel. Therefore, this study provides a tool to support decision-making processes in identifying practices that should be promoted by biodiversity and agro-ecology policy.