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Enhancing legume crop pollination and natural pest regulation for improved food security in changing African landscapes

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Abstract

Legumes are important crops for food security, consumed by millions of people especially in Africa where they are an essential protein source and provide key vitamins and minerals. Most legumes depend on insect pollination and natural pest regulation for sufficient yields, however, there is emerging evidence that yield gaps caused by lack of pollination and/or pest pressure may be common. Here we review the literature reporting on pollinators and natural enemies contributing to legume crop

yields, and the impact of land-use change on the services provided by these beneficial organisms. We identify strategies for enhancing the benefits of pollination and natural pest control in legumes and propose policy and practice interventions for better utilization of pollinators and natural enemies in legume cropping systems in Africa.

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Keywords

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