

# Effectiveness of traditional approaches in the management of desert locusts (*Schistocerca Gregaria* Forskål in arid areas of Isiolo and Laikipia (Kenya)

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## Abstract

The Horn of Africa has witnessed an upsurge in desert locust invasions (*Schistocerca gregaria* Forskål). Curiously, the first-line of management is often based on traditional methods. We assessed the effectiveness the traditional methods of desert locust control in two rural arid areas in Kenya between 2019 and 2020 using a questionnaire survey. Large swarms of desert locusts were observed during the migratory, feeding, and developmental stages during the driest months. Most of the identified stages were adults and 3<sup>rd</sup> nymphal instars. The past desert locust preventive strategies among the respondents were early planting, high seed rates, early warning strategies, and information interchange. The physical/mechanical control strategies used by the respondents during the outbreaks included digging up eggs, handpicking, smoking, and baiting. The cultural desert locust control strategies used by the respondents were noise from beating drums, metallic containers, and motorbike hooting. These methods had low effectiveness in controlling desert locust populations. Traditional methods of locust control should not rely solely on desert locust management. There is a need to integrate these traditional methods with new methods for desert locust control only when the swarms are low.

**Keywords:** Desert locust, Kenya, Physical methods, Cultural

methods, Traditional locust control, Mechanical desert control