

Bird Scaring

Introduction

- Over 15-20% of rice produced is lost to birds and other animals pests (insects, rodents, nematodes, snails and slugs).
- Birds, and especially red-billed quelea, inflict substantial losses on rice in Africa. The quelea bird is a sub-Saharan species, and widely distributed in Eastern Africa.



Fig 1. Juvenile, female and male red-billed quelea. Source: CABI, 2014

Damage on crop and economic impact

- Physical loss of the crop through (i) *direct* feeding on grain, and (ii) *indirect* (mechanical) damage that occurs when a flock of birds is active in a rice field, resulting in grains that fall to the ground. Physical losses are estimated at 15-20% of potential crop harvest, and can be as high as 50% during major invasions.

Damage on rice crop and economic impact (continued)

- The birds also feed on the rice during postharvest drying.
- Extensive labour requirements for bird scaring, use of child labour, health and environmental hazards resulting from the use of chemical sprays, and the discouragement of farmers from dry-season rice cultivation.
- Social consequences: farmers who scare birds in the field are socially separated from their families for a long time.

Control of bird damage

Prevent strategies: Good agronomic practices such as vegetation management, good weed management (as weeds attract birds), specific planning of the production season and choosing varieties with bird-resistant characteristics.



Fig 2. Rice bird scaring in Kibos, Kenya
Source: Lusike Wasilwa

Preventive strategies: Include the use of repellents (chemical substances aimed at deterring birds), protecting fields or nurseries with nets or wires, covering individual heads of ripening crops with grass or cloth, and manual bird-scaring efforts. The latter consist of a combination of **auditory** (e.g. noise-making devices, whips, shouting), **visual** (scarecrows, flags, reflective tape) and **physical measures** (e.g. throwing rocks or mud).



Fig 3. Bird scaring in Mwea
(Source: Saturday Nation, 2019)



Fig 4. Quelea trapped in a mist net, Tanzania
(Photo: R.A.Cheke).

Contact experts: Kimani, J. (john.kimani@kalro.org), Kega, V., Otipa, M., Wasilwa, L., Mutiga S., Mugambi, C., Wandera, F., Kirigua, V., Ochieng, V., Wayua, F., Mwongera, D., Ndungu, J., Nyamongo, D., Ngari, B., Zhou, B. (IRRI); Mitchell, T. (OSU); Wang, G. L. (OSU); Were, V., (TSL); Ouedraogo, I. (INERA); Rotich, F., (UoEm); Correll, J. C. (UARK) and Talbot, N. J. (TSL).

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