

# Producers' perceptions and endogenous strategies for the control of *Striga hermonthica* and impacts of cultural practices on millet (*Pennisetum glaucum* (L.) R. Br.) northern of Côte d'Ivoire

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## 1 SUMMARY

*Striga hermonthica* is a major constraint to cereal production northern of Côte d'Ivoire. The aim of this study was to analyse millet growers' knowledge of this parasite and to identify their endogenous control strategies a survey was carried out through group discussions and an individual questionnaire administered to 144 growers in four departments northern of Côte d'Ivoire. In this study, the presence of *Striga hermonthica* in millet fields was confirmed by 95.45% of the growers surveyed. Two morphotypes of the species were identified. Several factors responsible for its appearance in September were cited, including the type of gravelly soil, the drop in rainfall, the absence of fallow land and the decline in soil fertility. Analysis of the data provided on cultivation practices revealed that they are poorly carried out, which favors the appearance of *Striga hermonthica* in the plots. Farmers' methods of combating the pest include early sowing, spreading *Parkia biglobosa* powder, organo-mineral fertilization, uprooting *Striga* plants, using false hosts and crop rotation. The parasite is also used in traditional human medicine and dyeing. The study revealed a good knowledge of the parasite by farmers and could enable the development of control strategies using existing practices in the farming environment in order to reduce *Striga hermonthica* parasitism to a non-harmful threshold.