

第 16 回 JICA-JIRCAS-CG 勉強会

日時：

2024 年 5 月 8 日(水) 13:30 – 15:00 (日本時間)

演題： *Striga hermonthica* infestation in sub-Saharan Africa: A growing scourge limiting food production

講演者：

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コメンテーター：

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言語： 英語

概要 (原文ママ)：

—Evans A. Atera 氏

The angiosperm parasite, *Striga hermonthica*, is a major biological constraint to food security in sub-Saharan Africa. It parasitizes key cereals such as maize, sorghum, finger millet, rice and pearl millet, which are primary food crops in the region. About 50 million ha of croplands in Africa have *Striga* infestation, causing grain yield loss of about 75% estimated to be more than US\$10 billion annually. In Kenya, the western part of the country is considered the breadbasket, is heavily infested with *Striga*. Approximately 340,000 ha are infected, causing annual crop loss of US\$53 million.

A field survey was conducted in twelve Counties (administrative units) in western Kenya for three years (2019, 2022 and 2023). The study revealed that agriculture (95%) was the main source of livelihood for most households. Maize and sorghum which are important staple food crops are attacked by *Striga*, causing maize yield loss of about 47%. Several respondents (66%) have been producing these cereals on the same fields for more than ten (10) years thus enriching *Striga* soil seedbank reserve. Majority (44%) of farmers stated that poor soil management was responsible for increasing *Striga* infection in their fields.

According to the farmers, the popular control measures were application of fertilizer including manure, crop rotation and intercropping. However, the level of *Striga* infestation and damage was increasing in the fields and has continued to spread to new areas, yet most (61%) farmers were practicing the control measures. In our view a validated on-farm integrated program which will have far-reaching implications in combating the parasite and improving food security can be an option. Generally, Dr. Atera will discuss the impact of *Striga* infestation on croplands, highlighting the losses incurred and some of the measures undertaken to control the menace.

— 鮫島啓彰氏

Laboratory, pot and field experiments were performed to evaluate resistance of selected rice varieties in Sudan to a resident *Striga hermonthica* population. Based on the results, one rice variety had both pre-attachment (low *Striga* seed germination inducing activity) and post-attachment resistance (high inhibitory effect on the development of *Striga*) to a resident *Striga* population in Sudan. Another variety, which had been reported to have broad-spectrum resistance to *Striga* species and ecotypes, was clearly resistant to at least one resident *Striga* population in Sudan.

主催：JICA 経済開発部

参加登録方法：

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開催方法：

Teams を予定。会議リンクは会議前日までに参加希望者にメールで案内予定

以上