

Future prospect of the *Striga* project
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Abstract: Collaboration on *Striga* research between Japan and Sudan was started by two researchers in 1994. Since then the collaboration has continued with the support of international projects including Asia/Africa Science Platform Programs (2005-2007 and 2008-2010) funded by the JSPS. The number of the research participants has increased, relations and links among researchers in both countries have been strengthened. Through these activities our approaches to combat *Striga* have expanded and become multidisciplinary. Currently the program is composed of a variety of disciplines including chemistry, agronomy, technology transfer and socioeconomics. Subsequent to the start of the ongoing SATREPS project, in 2010, the *Striga* laboratory was established in SUST with full support from JICA. The well equipped laboratory, supplied with sufficient consumables, has made huge contributions in upgrading the research quality of the participants and makes possible carrying out experiments which cannot be conducted in Japan because of quarantine regulations. In addition, JICA has provided sufficient fund to promote mutual interactions between Japanese and Sudanese researchers. Young Sudanese researchers and extension officers have the privileged to participate and reap the benefits of international training courses organized by JICA. Under the same project JST has provided Japanese researchers with a fruitful research environment. Thanks to JICA, JST and participant researchers, the *Striga* project has made a steady progress toward the goals set in its mandate. We have several promising buds for the near future, including a suicidal germination inducer T-010 and a *Striga* resistant rice cultivar SATREPS1. Biological control, employing microorganisms together with implementation of cultural practices are yielding interesting results. Farmers' field schools function to collect and distribute information between researchers and farmers. In vitro cultures have been established to further understanding *Striga* metabolism. Based on furthering understanding of *Striga* metabolism new ideas may be generated and innovate technologies may be developed. Analysis of characteristic stomata response of *Striga* is to contribute to efficient water management and thus lessen the parasite damage. Analysis of farmers' preference in crops and selection of high stimulant producing varieties to be planted in rotation with sorghum is to enable us propose and design new crop sequence in *Striga* endemic areas. Reinforcing the multidisciplinary approach, integration of the results obtained and encouragement of participation of the private sector are to be integral components of the program in the second half of the project period.

Keywords: Japan, Sudan, JICA, JST, JSPS, SATREPS