

**PESTICIDE PROBLEMS IN THE KOYA AREA OF
ANDHRA PRADESH, INDIA:
TOWARD THE INVENTION OF APPROPRIATE TECHNOLOGIES
AS A SOLUTION**

TSUNASHIMA Hiroyuki

Graduate School of Asian and African Area Studies, Kyoto University, Kyoto 606-8501, JAPAN

E-mail: tunasima@asafas.kyoto-u.ac.jp

Field research on the farming system used by a village of Koya people revealed that pesticide spraying had become increasingly intensive because of the recent prevalence of chili cash cropping. Here, I report the extent of the village's pesticide problems and analyzed the agro-ecological background of the problems to develop a solution. Frequent pesticide use causes acute poisoning, especially among small-scale farmers. Moreover, pesticides account for about 25% of the production costs of chili cash cropping, which are much higher than those of any other crops cultivated in the study village. Most chili cultivators raise funds by borrowing money from outside loaning agencies. Once the selling prices decline, these cultivators become deeply indebted. It is a gamble where success or failure depends on external factors. Thus, it is necessary to devise an inexpensive, safe, and autonomous alternative to spraying of commercially sold pesticides. An investigation of forest products revealed that the use of botanical pesticides made from locally available plant materials may be a viable solution.

Keywords: Botanical pesticide, Farming system, Pesticide poisoning, Plant resource, Production costs