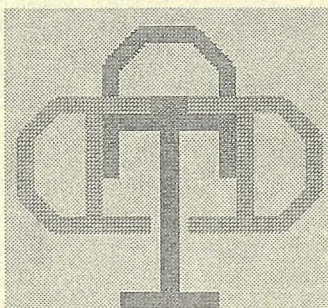


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Altogether, five missions were undertaken to Madagascar. These involved field assessments, aerial surveys, managerial support services for the national locust organisation and product evaluation for international chemical companies (AgrEvo and Bayer). Numerous helicopter missions (one of which almost ended in a near fatal crash!) to evaluate the current locust situation and to provide strategic managerial backup for the locust organisation were completed in Madagascar. One such mission, for example, involved assessing a residual swarming population found in the barrier treatment areas, at the conclusion of the campaign in April 1999. Samples drawn from these swarms were dissected and their degree of cuticle hardness, coloration, fat body content and ovary development determined. From the results obtained with predominantly teneral and immature specimens, it was concluded that the swarms were all of local origin and certainly not immigrants from distant outside sources, as was being asserted by those responsible for this campaign.

Current and Future Perspectives of the Migratory Locust Plague in Madagascar

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Since the early 1990s there has been a gradual population increase of the Madagascar migratory locust, *Locusta migratoria capito*, due to suitable climatic conditions, in particular rain. An outbreak situation was reached in early 1997 and control activities were initiated by the Government with assistance from the donor community and under the overall coordination of the Food and Agriculture Organization of the United Nations. The control strategy was mainly based on the use of barrier treatments with fipronil 7.5 g ai/l against hopper bands and blanket treatments of swarms with deltamethrin 17.5 g ai/l. Farmers were also provided with insecticide powder (propoxur and fenitrothion) to protect their crops. There is a general consensus that the control activities, consisting of 2,954,000 ha protected by barrier treatment and 780,267 ha treated by cover sprays between May 1998 and May 1999, have reduced the locust populations considerably. However, currently the locust situation retains many characteristics of an outbreak, and survey and control activities must be continued over the months and years to come. Medium and long term objectives are to reestablish a preventive control organization, as the scientific basis for such a preventive strategy currently exists in Madagascar.

Environmental Changes Precipitate a Serious Locust Outbreak in Indonesia

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Serious outbreaks of oriental migratory locusts, *Locusta migratoria manilensis*, have been reported on different islands of the Indonesian archipelago since early 1998, especially in southern Sumatra, but also in Java, Kalimantan (Borneo), Sumba, Timor, Sulawesi (Celebes), and Flores. In the long term, the intensive deforestation that has been under way over the last 20 years is certainly partially responsible for these outbreaks. The drought that prevailed in the region in 1997 also seems to be a major recent factor that prompted these outbreaks. In 1999, the situation continued to be serious in several islands, especially in Sumba. By the beginning of January 2000, swarms of millions of locusts were described arriving on Waingapu city in the Eastern part of Sumba.