



A SCREWWORM ERADICATION PROGRAMME FOR JAMAICA AND OTHER CARIBBEAN NATIONS

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There has been interest in the eradication of the New World Screwworm (NWS), *Cochliomyia hominivorax*, from the infested Caribbean islands for a very long time. This includes the islands of Jamaica, Cuba, Hispaniola (Dominican Republic and Haiti), Trinidad and Tobago. All other Caribbean countries are NWS free. Puerto Rico was once infested with the pest but it was eradicated in 1977. Of all the island nations, the greatest interest has been shown by Jamaica in that they investigated the possibility of an eradication programme as early as 1958 when the NWS was eradicated from Florida and the southern United States. Since that time other efforts have been made in Jamaica to organize an eradication programme but all were without success. The reason was always insufficient funding or non availability of sterile flies. However, now, based on the wide spread interest for eradication in all the infested Caribbean countries, along with strong cooperation from international Agencies, in particular FAO and IAEA, it is now a fact that a systematic eradication for the Caribbean will begin first in Jamaica during 1998 with the first sterile fly releases to begin in January 1999.

The pest is a serious problem in all Jamaican livestock but pigs and dogs serve as the principle host. Annual losses in Jamaica are estimated between US\$ 5.5 to 7.7 million. The cost of an eradication programme for Jamaica is about US\$ 9 million and will require 3 years for completion. A plan for the eradication has been developed and the funds for the Jamaica programme have been obtained from both National and international sources. Sterile flies will be provided from the screwworm rearing factory located in Tuxtla Gutierrez, Mexico. Twenty million pupae will be delivered, by air, once a week to Kingston, Jamaica. The pupae will emerge in 2 large, heated chambers and will be attracted (fly) into a lighted, cold chamber (10° C). The inactive flies will then be collected and released as chilled adults over Jamaica. The procedures and methods used will be identical to those used in the eradication programmes now underway in Central America. Jamaica has a land mass of 10,991 km sq. and over 50% of the island has a slope of over 25%. The weather is tropical and suitable for NWS reproduction at all times of the year but populations do have natural highs and lows based on rainfall.

Once completed other eradication programmes are proposed to follow for Cuba and Hispaniola. Trinidad and Tobago cannot be considered for a programme at this time because of their closeness to South America. For Cuba it will require about 150 million flies/week, the cost will be about US\$ 60 million and it will require 3 to 5 years to complete eradication. Hispaniola will require about 95 million flies/week, it will cost about US\$ 67 million and will require 3 years for completion. The eradication of the pest from the Caribbean will not only have impact for the "freed" countries but also for the entire region based on the reduced chance of an accidental introduction into already eradicated areas or into other areas that have always been NWS free. The presentation will cover more details of the eradication programme.