



منظمة الأغذية
والزراعة
للأمم المتحدة

联合国
粮食及
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Food
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Продовольственная и
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организация
Объединенных
Наций

Organización
de las
Naciones
Unidas
para la
Agricultura
y la
Alimentación

FAO DESERT LOCUST CONTROL COMMITTEE

Thirty-ninth Session

Rome, 10-13 March 2009

Commission for Controlling the Desert Locust in the Central Region (CRC) (Agenda Item 22b)

Introduction

A number of activities, either organized or supported by the Commission (CRC), had been carried out from January 2006 to December 2008.

The main achievements of the Commission's were taking over EMPRES Central Region activities by early January 2006 and the official admittance of Eritrea to the Commission. The Commission played an important role in addressing several locust outbreaks and a small upsurge in the region in 2007 by supplementing national efforts as well as additional support provided by UN/CERF, FAO/TCP, Saudi Arabia, Japan and USA.

This paper presents an overview of CRC activities in training, research, joint surveys and publications.

Training on Desert Locust management

The Commission places strong emphasis on building national capacities in the Central Region through a continuous training programme. Consequently, CRC organized short-term, mid-term and long term training in order to strengthen national capacities in locust early warning, reporting and control. Training courses and workshops were organized using national expertise. The impact of the training contributed to increased skills of national Information Officers and locust survey and control officers who are undertaking field operations in a more professional manner.

(a) Short-term training

- **One Regional training course** on Desert Locust aerial applications organized and conducted jointly with DLCO-EA in June 2007 in Lake Zeway, Ethiopia.
- **Three Sub-regional training courses** on aspects of Desert Locust biological, survey and control were organized and conducted in Doha, Qatar in April 2006; in Damascus, Syria in July 2007 and in Al-Fujairah, United Arab Emirates in May 2008. All trainees were from

non-front-line countries and Master trainers were from the region (i.e. Egypt, Lebanon, Oman, and Sudan).

- **National training courses** were organized and conducted in 2006 in Egypt (1), Oman (1), Qatar (1), Sudan (1) and Yemen (1); in 2007 in Djibouti (1), Eritrea (2), Ethiopia (1) and Sudan (1); and in 2008 in Egypt (1), Ethiopia (1), Saudi Arabia (2) and Yemen (1). A number of local training courses were conducted for scouts, laborers and farmers in Eritrea. Support was also given to regional workshops on blood measurements in Yemen and sprayer maintenance in Agadir, Morocco in 2008. National expertise was exploited in all of these training courses and workshops.
- **On-the-job training** was organized by DLIS, and supported by the Commission, on RAMSES and eLocust2 in Egypt and Sudan in 2007 and in Saudi Arabia in 2008. A regional workshop (2007) and inter-regional workshop (2008) were held in Cairo on data management, processing, archiving and analysis as well as on using RAMSES and eLocust2, interpreting satellite imagery, and forecasting.

(b) Mid-term training

For the seventh consecutive year, the Commission with the EMPRES/CR Program financed the Desert Locust Management Diploma Course that started in 2001 at the University of Khartoum, Sudan. A total of 43 students from a dozen countries (Sudan 12, Egypt 8, Yemen 7, Ethiopia 5, Iraq 2, Saudi Arabia 2 and Syria 2, one from each of Eritrea, Oman, Jordan, Libya and India) have studied under the programme and graduated with a diploma.

Although there is general consensus within the Commission that the primary objective of the Post-Graduate Diploma is valid and the course should be continued, the cost to the Commission of doing so is too high – more than USD 150,000 for the minimum number of six students required by the University per year. This cost represents more than two thirds of the entire annual contribution of the CRC Member Countries. Unfortunately, no other support is provided to the course from outside of the Commission. Therefore, the 26th session of the Commission recommended to suspend the Desert Locust Diploma Course for the time being, which could be resumed whenever there are sufficient funds from sources other than the Commission Trust Fund.

(c) Long-term training

The Commission funded one MSc Fellowship from Egypt who graduated in 2006. Two additional MSc fellowships were approved by the CRC for an Egyptian and Sudanese candidate in 2008. The study will take place in the UK (one year each) and the focus will be on GIS and remote sensing issues.

Research

The Commission encourages Member Countries in the Central Region to submit research proposals on Desert Locust topics according to a prioritized list of research needs as discussed within the Commission. It is felt that through research, in particular applied research, solutions and answers to Desert Locust problems and difficulties could be achieved. Furthermore, qualified professional staff in various topics often emerges from undertaking research studies. The Commission supported the following efforts:

- A study on the *Field evaluation of Green Muscle against grasshoppers in Ethiopia* under the supervision of the Desert Locust Control Organization for Eastern Africa (DLCO-EA) from April 2005 to December 2006.
- A study on *the use of the IGR Teflubbensuron (Nomolt), as a control agent against the Desert Locust, Schistocerca gregaria (Forsk.) alone and combined with Metarhizium anisopliae (Metsch.) and pheromones; Phenyl Aceto Nitrile (PAN) and Nymph Pheromone Blend (NPB)*. Field testing was carried out in January and two progress reports were received in 2008. The Sudanese researcher is expected to acquire his Masters Degree (MSc) from this research.

- A study on *Efficacy, shelf life and field application properties of new formulations of Metarhizium anisopliae used against the Desert Locust, Schistocerca gregaria (Forsk.)*. The research started in October 2008 by a Syrian researcher along the Red Sea coast of Sudan who will obtain his MSc degree from this research.
- Proposal of a research study on *Host plants species composition and abundance in relation to major soil and environmental factors in habitats of Desert Locust (Schistocerca gregaria (Forsk.) in Eastern, Ethiopia* was received in December 2008 and approved. Again the researcher is expected to acquire his MSc degree from this research.
- The Commission followed up the progress of ICIPE's *Ecotoxicological Research Studies on PAN* that was carried out in Sudan and concluded in October 2008.

Joint Surveys

Joint border surveys between Egypt/Sudan and between Saudi Arabia/Yemen are now becoming a sustainable and routine activity carried out and funded by the countries. Important positive achievements and advantages resulted from the joint border surveys. For example, inaccessible areas that contain Desert Locust habitats were surveyed that may not have been monitored by national surveys. Joint surveys also allow locust officers from the participating countries to exchange of information and experience amongst themselves. Joint survey programs were supported and executed as the following:

- the 5th, 6th and 7th annual joint border surveys between Egypt and Sudan were undertaken in 2006, 2007 and 2008.
- the 3rd, 4th and 5th annual Saudi Arabia/Yemen joint border surveys were conducted in 2006, 2007 and 2008.

Publications

The Commission undertook the responsibility of the following publications:

- Continuation of the translation and distribution of the monthly *FAO Desert Locust Bulletin* into Arabic;
- Reproduction of the *FAO Desert Locust Master Trainer's Manual* and kit for Member Countries in the FAO Commission for Controlling the Desert Locust in Southwest Asia (SWAC);
- *The Desert Locust Glossary in English and Arabic* was concluded. The compiled Glossary English (2007) & Arabic (2008) was forwarded to CLCPRO in order to prepare the French version and to add any Arabic terms used in the Western Region. The Glossary will soon be available electronically in English and Arabic.
- The CRC-EMPRES/CR web site was established at the end of 2006 in order to provide information on the countries (profiles, activities, reports and references) and other information, applications and links related to Desert Locust. The web pages complements rather than duplicates the FAO Locust Watch web site operated by DLIS. The Commission upgrades and updates the web pages regularly.
- In collaboration with EMPRES, *A Field Guide to Vegetation in Desert Locust Breeding Areas* was produced in January 2008 and distributed widely to all concerned authorities for the benefit of Desert Locust field staff.
- The Commission reproduced and distributed additional copies of the pocket-sized laminated *FAO Standard Operating Procedures (SOPs)* on ground survey (version 2), ground control, aerial survey and control, radio communications in English and Arabic.
- Standard Operating Procedures (SOPs) for *Mixing Green Muscle® Technical Dry Powder (TC) and Oil Flowable Concentrate (OF) formulations and Mixture Ratio for Field Application* was finalized, jointly between the Commission and the Environment Officer FAO HQ, at the end of 2008 and printed in 2009.

Other Activities

The Secretary of the Commission participated in and/or organized various events not mentioned in the previous activities: CRC Executive Committee meetings and Sessions, CLCPRO and SWAC meetings, backstopping to member countries, regional and sub-regional training courses, workshops and others.

Conclusion

The common objective of the Commission's training programmes, research studies, publications and Desert Locust Emergency Prevention meetings is to provide national locust staff, particularly in the field, with the appropriate skills, information and guidance so they can undertake effective and timely Desert Locust survey and control operations in a professional manner. This approach complements the preventive control strategy adopted by the DLCC with particular emphasis on the front-line countries. However, the Commission encourages all stakeholders to undertake more field trials to assess the impact of conventional pesticides used in Desert Locust control operations on humans and the environment.