# **LOCUST BULLETIN No. 19**



FAO - Plant Production and Protection Division (AGPM)

15 October 2012

# Situation level - Situation level - CIT, DMA and LMI: CALM

# General Situation during September 2012

# Forecast until mid-November 2012

Locusts were progressively disappearing from all Caucasian and Central Asian (CCA) except in Uzbekistan where infestations of the Asian Migratory Locust (LMI) were reported around the Aral Sea. Only 600 ha were treated this month in the Russian Federation. The situation was calm everywhere and no further development is expected this year.

<u>Caucasus</u>. Italian Locust (<u>CIT</u>) mating and egglaying was still observed in **Armenia**, but locust lifecycle was completed elsewhere. Egg-bed surveys were under preparation in **Azerbaijan**.

Central Asia. Only limited control operations were conducted in the Russian Federation (600 ha). <u>LMI</u> infestations by mostly adults populations were reported over 70,000 ha around the Aral Sea, in Uzbekistan but no treatments were carried out. Egg-bed surveys were carried out in Kyrgyzstan.

# Weather and Ecological Conditions in September 2012

Temperatures decreased everywhere in CCA countries but weather remained warm in Caucasus.

In **Caucasus**, warm weather prevailed in Armenia and Azerbaijan.

In Armenia, the weather was still mainly warm and no rain was reported. Temperatures ranged from 9/14 °C to 31/37 °C in lowlands, from 4/6 °C to 28/35 °C at foothills and from 0/5 °C to 23/27 °C in mountainous areas, which represented an average decrease of almost 6 °C as compared to August. Harvesting of grain, fruit, vegetable and melons continued during the month.

In Azerbaijan, the weather was mostly warm during the first half of September and temperatures started decreasing by mid-month, with average daily temperatures dropping to 24-26 °C; it represented a decrease of 12 °C as compared to August. Four rainy days were reported during the month. Natural vegetation was dry with a medium cover in all traditional locust habitats; adjacent crops had been harvested.

In **Central Asia**, temperatures decreased from 4 to 15 °C in all countries. Fist frost was recorded in Kyrgyzstan and in the Russian Federation and snow fell in Tajik mountains.

In Kyrgyzstan, the average monthly temperature was normal, of 11-13 °C in Naryn, 16-18 °C in Chui and Talas and 18-20 °C in Batken and Jalal-Abad, which represented a decrease of 4 °C but an increase of the range as compared to August. During the first decade,

the temperatures varied from 12/22 °C at night to 27/35 °C during the day; they decreased during the second and third ones dropping as low as 5-15 °C at night and 10-27 °C during the day. Frost was also observed for a few days. The rainfall was above normal (8-22 mm) for the second consecutive month. The maximum wind speed was of 11.5 m/s. The vegetation was dry with a sward height varying from 0,3 to 2 cm and a medium cover.

In the Russian Federation, temperatures dropped by 5-15 °C as compared to August. The weather was characterized by low temperatures and rains of variable intensity in the southern areas of the Central Federal District (FD); the average daily temperature was of 13-15 °C (decrease of 15 °C). The weather was variable with local rains in the North Caucasus and Southern FDs with average daily temperature of 17-20 °C (decrease of 15 °C). In the Volga FD, variable weather prevailed with average daily temperature ranging of 12-18 °C (decrease of more than 10 °C); the first frost was reported in some areas. In the Siberian FD, the weather was moderately warm and some rains fell, with average daily temperature of 14-16 °C (decrease of 5 °C).

In Tajikistan, the daily average temperature was of 30-32 °C in Khatlon, 27-29 °C in Region of Republican Subordination (RRS) and 38-30 °C in Sughd, which represented a decrease of more than 9 °C as compared to September. Throughout the country, the temperature was lower by 3-5 °C as compared to September 2011. Snow fell in some areas of Badakhshan at the end of the second decade and again at the end of the month.

In Uzbekistan, the average day temperature was of 20-26 °C and the night one of 9-12 °C, representing a decrease of more than 10 °C as compared to August.

# **Area Treated in September 2012**

(as per information received from countries)
Russia 600 ha

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## **Locust Situation and Forecast**

(see also the summary on page 1)

#### **CAUCASUS**

#### **Armenia**

#### SITUATION

The development of <u>CIT</u> continued in September. Egg-laying followed by natural death were observed in lowlands and hills while mating and egg-laying was in progress in the mountainous areas. Neither control operations nor cross-border surveys were carried out during the month.

#### **FORECAST**

CIT egg-laying will come to an end and all adults will eventually disappear. No further development will occur this year. Forecasts for 2013 anticipate that at least 4,000 ha infested by CIT will require treatments and do not exclude arrivals of <u>DMA</u> populations.

#### **A**ZERBAIJAN

#### SITUATION

<u>DMA</u> egg-laying ended in the north-west (Djeiranchel, Eldar steppes) and in the east (Garas, Padar plain) and adults disappeared progressively. No field operations were carried out in September but preparation was in progress for the autumn egg-bed surveys and local residents, especially farmers, informed accordingly.

# • FORECAST

No further development is expected this year. The results of the egg-bed surveys (egg-pod density per unit area and distribution of the egg-pods) will be used for planning 2013 operations.

# Georgia

# • SITUATION

No report was received for September.

#### FORECAST

No further development is expected this year.

#### **CENTRAL ASIA**

#### Afghanistan

#### SITUATION

No report was received for September.

#### FORECAST

No further development is expected this year.

#### Kazakhstan

#### SITUATION

No report was received for August.

#### FORECAST

No further development is expected this year.

#### Kyrgyzstan

#### SITUATION

Summer surveys on mating and egg-laying adults were carried out on 7,783 ha, of which 4,689 were infested at densities up to 5 adults/m². Egg-pod autumn surveys were conducted in Naryn on 3,214 ha and an average density of 2.4 egg-pods/m² (with 68.5% of viable eggs) was observed over 1,628 ha. They are still in progress in the other provinces. No control operations were carried out in September.

#### • FORECAST

No further development is expected this year. Based on the results of surveys conducted so far, it is anticipated that 30,000 ha will require treatments in 2013, of which 8,000 ha against <u>DMA</u> and 20,000 ha against <u>CIT</u>, representing an average increase by 7% as compared to 2012.

## **Russian Federation**

#### • SITUATION

The results of adult surveys carried out in September in five Federal Districts (FD) were the following: average of 1.9 adults/m² on 13.7% in the Central FD; average of 16 adults/m² on 46.3% in the Southern FD; average of 42.1 adults/m² on 47.5% in

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the North Caucasian FD; average of 7.25 adults/m<sup>2</sup> on 45.5% in the Volga FD; and average of 6.5 adults/m<sup>2</sup> on 52.7% of the surveyed area in the Siberian FD.

Control operations were carried out on 600 ha. The total treated area during the 2012 campaign is of 1.637,400 ha.

# • FORECAST

During the forecast period, egg-laying will come to an end and adults will eventually disappear.

#### **Tajikistan**

#### SITUATION

Egg-bed surveys continued in September. Collection of specially designed forms on crop protection activities against locusts was also carried out in order to report on effectiveness of funding allocated and spent for controlling locusts.

# • FORECAST

No further development is expected this year.

#### Turkmenistan

# • SITUATION

No bulletin was received for September.

## • FORECAST

No further development is expected this year.

#### Uzbekistan

# SITUATION

During the third decade of September, surveys carried out in the Aral Sea area indicated that more than 70,000 ha were infested by <u>LMI</u> populations (mostly adults) at density varying 4 to 20 adults/m². Mass oviposition was observed. No control operations were carried out because wheat and rice were already harvested and that there was no risk to cotton.

#### • FORECAST

In case the area currently infested by LMI adult populations is not flooded during next spring, a LMI

# **Announcements**

**Locust warning levels.** A colour-coded scheme indicates the seriousness of the current situation for each of the three main locust pests: green for calm, yellow for caution, orange for threat and red for danger.

The scheme is applied to the Locust Watch web page dedicated to the current locust situation ("Locust situation now!") and to the regional monthly bulletin header. The levels indicate the perceived risk or threat of current locust infestations to crops and appropriate actions are suggested for each level.

Locust reporting. During calm (green) periods, countries should report at least once/month and send standardized information using the national monthly bulletin template. During caution (yellow), threat (orange) and danger (red) periods, often associated with locust outbreaks and upsurges, updates should be sent at least once/week. Affected countries are also encouraged to prepare decadal bulletins summarizing the situation. All information should be sent by e-mail to Annie.Monard@fao.org. Monthly information received by the 5<sup>th</sup> of each month will be included in the CCA Locust Bulletin to be issued by mid-month; otherwise, it will not appear until the next bulletin. Reports should be sent even if no locusts were found or if no surveys were conducted.

<u>September events and activities</u>. The following activities were in progress or occurred:

- From December 2011, preparation of the monographs on the three CCA locust pests.
- Study on remote sensing and geographic information systems (GIS) applications used for locust management in CCA under finalization.
- E-committee on background documentation on locusts in CCA continued its work.
- E-committee on pesticides registration for locust control in CCA continued its work.

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- Follow-up of issues related to equipment delivery.
   <u>Note</u>: the above activities were implemented thanks to funding from FAO Regular Programme, FAO Technical Cooperation Programme and USAID.
- October events and activities. The following activities are scheduled:
- E-committee on background documentation on locusts in CCA to end its work.
- E-committee on pesticides registration for locust control in CCA to end its work.
- Technical Workshop on Locusts in CCA, Bishkek,
   Kyrgyzstan, 12-16 November, under preparation.