



Locust Watch

Locusts in Caucasus and Central Asia

LOCUST BULLETIN No. 1



FAO - Plant Production and Protection Division (AGPM)

15 April 2010

Situation level - Moroccan Locust (DMA) at least in southern Uzbekistan: CAUTION

Situation level - Italian Locust (CIT), Migratory Locust (LMI) and DMA elsewhere: CALM

General Situation during March 2010 Forecast until mid-May 2010

The locust situation was calm during March in the major part of the Caucasian and Central Asian regions due to weather conditions still unsuitable for hatching. In southern Central Asian countries, hatching of the Moroccan Locust (DMA) started from mid-March and control operations were undertaken against small bands of young hoppers over more than 50,000 hectares. Natural vegetation is slowly growing and greening; cereal crops are in the tillering stage. As the forecast period corresponds to hatching or hopper development of the three main locust pests, locust numbers will progressively increase, which will probably result in some local infestations.

Caucasus. No hatching was reported in March. Temperatures were cold to cool and snow fell from time to time. DMA hatching will start in April in **Azerbaijan** and south-east **Georgia** and CIT hatching from the end of April in **Armenia** and Georgia.

Central Asia. DMA hatching started from mid-March in **Tajikistan**, **Turkmenistan** and **Uzbekistan** and

young hoppers formed small bands against which chemical and mechanical control operations were undertaken. A similar locust situation is probably developing in **Afghanistan**. No hatching was reported elsewhere in the region.

Weather and Ecological Conditions in March 2010

Cool temperatures prevailed in CCA where the weather and ecological conditions are becoming slowly suitable for hatching and hopper development.

In **Caucasus**, the weather was dry to rainy in lowlands and snowy in mountainous areas.

In all regions of Armenia, rainy weather prevailed during March and snow fell in mountainous and foothill areas. Daily temperatures ranged from 0° to +22°C in lowland regions, from -20°C to +20°C in the foothill regions and from -20°C to +16°C in mountainous areas. In crops (perennial and wintering plants) and fallow lands where surveys were carried out, vegetation was still mostly dry and rare but sprouting.

From April 2010, the FAO Bulletin on Locusts in Caucasus and Central Asia will be issued every month by the Plant Production and Protection Division (AGP), Rome, Italy. It will present the locust situations of the previous month in nine countries from Caucasus and Central Asia (CCA) concerning the three following locust pests: the Italian Locust (CIT), the Moroccan Locust (DMA) and the Migratory Locust (LMI).

In Azerbaijan, weather conditions were quite mild in February with non-significant precipitation and daily temperature of 3-5°C. In March, prevailing cool weather conditions with daily temperatures of 7-9°C were not favorable for locust egg development and hatching. Vegetation (wormwood, spring ephemeroïdes) started its development in traditional locust habitat and crops were at shoot and tillering stages.

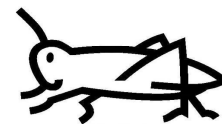
In Georgia, rain was less than usual in March and there was snow for 5-7 days.

In **Central Asia**, cool and variable weather prevailed with relatively frequent rains.

In Kazakhstan, variable weather prevailed throughout the country. In the southern region, there were sudden changes in temperature, which varied from -9 to +15°C, with minimum and maximum of -15°C (Almaty region) and +30°C (in Djambil region) respectively; precipitation fell as rain and snow. In the eastern region, temperatures ranged from -8° to +8°C, with minimum and maximum of -35°C and +12°C, respectively. In the western region, the weather was cloudy and variable, with higher temperatures and slight precipitation. In the northern region, weather conditions were unstable with clear sunny days as well as cloudy ones, warm temperatures during the daytime, causing snow melting, and precipitation in the form of rain and wet snow. Average temperature varied between -14°C and -1°C, with minimum and maximum of -31°C and +9°C, respectively. Cereal crops were in the tillering stage, perennial grasses at the beginning of vegetative development and fruit trees in the phase of blooming or bud opening.

In Tajikistan, daily temperature was of 16-24°C and wind of 5-7 m/s during the second fortnight of March. Vegetation was dense and greening.

In Uzbekistan, the weather was cool with frequent rains. Vegetation is less developed and less abundant compared to previous years.



Area Treated

Tajikistan	2,860 ha (mechanical control)
Turkmenistan	40,000 ha (up to 4 th April) -Unconfirmed
Uzbekistan	10,000 ha (up to 7 th April)

Locust Situation and Forecast

(see also the summary on page 1)

CAUCASUS

Armenia

• SITUATION

No hatching was observed and no locusts were reported during surveys carried out in March.

Training on locust monitoring was delivered to plant protection specialists.

• FORECAST

Hatching of Italian Locust (CIT) will start by the end of April and peak will occur in May in Aragatohtn, Shirac, Gegarkunic, Kotaic regions. No development is expected concerning the two other locust pests. Based on results of the previous campaign, 2010 control plan concerns 4,000 ha.

Azerbaijan

• SITUATION

An end-of-winter survey of Moroccan Locust (DMA) egg-beds was carried out to assess egg survival and determine hatching period. No hatching was reported so far.

• FORECAST

DMA mass hatching and hopper development will occur in April, stimulated by warming and improvement of weather conditions. Chemical control operations should start by mid-April.

Georgia

• SITUATION

No surveys were carried out in March and no hatching was reported.

• FORECAST

Hatching of DMA is likely to start by the end of April in Samukhi area (south-east Georgia) and hatching of CIT (the most important locust pest) during second fortnight of May in other parts of the country.

CENTRAL ASIA

Afghanistan

• SITUATION

No surveys were carried out in March.

On 7-22 March, the 2010 locust management program was presented to provincial agricultural and other governmental authorities in concerned areas.

• FORECAST

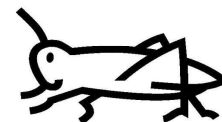
Hatching and hopper development will continue in all areas where DMA and CIT egg-pods were laid during the 2009 season. The situation should be carefully monitored.

Kazakhstan

• SITUATION

No hatching was observed and no locusts were seen in March during egg-bed surveys whose results are the following: for CIT, 12-35 eggs by pod, 0,5-10,0 egg-pods/m² and about 0.02-18% (maximum of 25% in Almaty oblast) of infected eggs in the southern region; for DMA, 21-32 eggs by pod, 4-8 egg-pods/m² and about 0.03-17% of eggs infected by flies and fungal diseases in South-Kazakhstan oblast; and for LMI, 70-110 eggs by pod, 0.8-10 egg-pods/m² and about 2.5-18% eggs affected by bacterial diseases in Qyzylorda region.

A republic-wide meeting on "Results of monitoring activities on harmful, most dangerous pests and quarantined objects of agricultural crops in 2009 and objectives for 2010" was held on 11-12 February.



Training courses are also delivered at national level and in the regional and district branches.

• FORECAST

CIT hatching will start during the second half of April in South-Kazakhstan and Djambil oblasts and by the end of the month in the south-eastern part of the country. DMA hatching is expected to occur in early April in South-Kazakhstan oblast.

Kyrgyzstan

• SITUATION

No report was received.

• FORECAST

DMA and CIT hatching and hopper development will occur during the forecast period.

Taijkistan

• SITUATION

DMA hatching and young instar hoppers, forming small bands at density up to 100-200 hoppers/m², were observed during surveys carried out over 47,200 ha in 15 districts on 15-27 March. Mechanical control was carried out on 2,860 ha. The following data on DMA were also registered: 8-12 eggs by pod, 2-4 egg-pods/m² and 20-25% infected eggs.

• FORECAST

DMA hopper development will continue during the forecast period. Regular surveys should be carried out to monitor the situation and undertake timely and appropriate control operations. CIT hatching should start by the end of the forecast period.

Turkmenistan

• SITUATION

No report was received. Indirect information indicated that DMA hatching began on 14 March, 2nd and 3rd instar hoppers were present in early April and 40,000 ha had been already treated.

• FORECAST

DMA hopper development will continue and further infestations will probably have to be controlled.

Uzbekistan

• SITUATION

DMA hatching started on 25 March in Kashkadarya Province (southern Uzbekistan) with mass hatching on 28 March-2 April. On 7 April, 1st and 2nd hopper instars were present. Current poor weather conditions result in slow hopper development; as grass is less abundant than previous years, hopper populations are spread out over large areas. So far, 10,000 ha have been treated.

• FORECAST

DMA hopper development will continue. Careful monitoring should be pursued to control infestations as early as possible and prevent further adult movements.

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's 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 5th 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.

2010 events. The following activities are scheduled or planned:

- **Joint cross-border activities** between Uzbekistan and Turkmenistan on 30 March-4 April.
- **Joint cross-border survey** between Georgia and Azerbaijan on 20-21 April.
- **Joint cross-border survey** between Georgia and Armenia on 22-23 April (provisional dates)
- **Regional technical workshop on control techniques.** 18-22 October, Kyrgyzstan (tentative date and location)