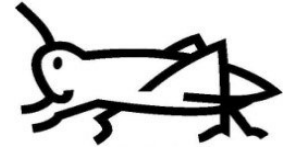




LOCUST BULLETIN No. 101



FAO - Plant Production and Protection Division (NSP)
FAO - Locusts and Transboundary Plant Pests and Diseases Team (NSPMD)

15 April 2025

Situation level: THREAT in Afghanistan, Tajikistan and Uzbekistan (DMA)

Situation level: CALM elsewhere or for the other locust pests

General situation during March 2025

Forecast for April 2025

Moroccan locust (DMA) hatching began in southern Central Asia (CA), during the second decade of March in Tajikistan and the third decade in Uzbekistan and then Afghanistan. No hatching of DMA or other species was reported elsewhere. During the forecast period, in the above mentioned countries, DMA mass hatching will be completed and hopper development will continue. Its hatching will start in Kazakhstan, Kyrgyzstan, Turkmenistan, the Russian Federation, as well as in Azerbaijan and Georgia. Italian locust (CIT) hatching may start in the southern CA countries at the end of the forecast period. Asian migratory locust (LMI) hatching is not expected in April. In March, 3321 hectares (ha) were treated against DMA in Tajikistan and Uzbekistan, which is two and half times lower compared to the same period of 2024 (8616 ha).

Caucasus. No locust hatching has occurred in this subregion. DMA hatching may start during the second half of April in Azerbaijan and in the Russian Federation and at the end of April in Georgia. CIT or LMI hatching is not expected during the forecast period.

Central Asia. DMA mass hatching started on 16 March in the south of Tajikistan, which was three weeks later than last year. Hatching started on 20 March in the southern and central parts of Uzbekistan, which was almost at the same time than last year. In northern Afghanistan, it started on

23 March this year, which was about two weeks later than in 2024. Control operations have started in Tajikistan and Uzbekistan while it will begin in early April in Afghanistan. DMA hopper development will continue in these areas. Hatching will start in early April in Turkmenistan, Kyrgyzstan and southern regions of Kazakhstan. CIT hatching is forecasted to start in the second decade of April in Tajikistan and Uzbekistan. LMI hatching is not expected during the forecast period.

Weather and Ecological Conditions in March 2025

In March, the temperature was close to the norm at the beginning of the month in the central and southern parts of Central Asian (CA) countries, but it was lower than the norm with higher precipitations at the end of the month. In other parts of CA and Caucasus, the temperature and precipitations were generally close to the norm.

In Caucasus, the weather conditions were close to the norm in March.

In Armenia, the average temperature and precipitations in March were close to the climatic norm. The winter cereals were at the tillering stage, and the stone fruits, such as apricots and plums, started to bloom in the lowlands.

In Azerbaijan, the average monthly temperature and precipitations were close to the climatic norm during the reporting period. The average monthly temperature was of



6-8°C (4-5°C at night and 9-11°C at daytime) in the Kudri steppe and of 5-7°C (3-5°C at night and 9-11°C at daytime) in Djeyranchel steppe. Precipitations in these areas were generally close to the norm, while in some other areas they exceeded the norm. Vegetation in pastures started to grow and was of medium density. Winter-sown cereals started booting in the valleys.

In Georgia, if the temperature and precipitations in March were close to the annual norm, the overall winter weather conditions were warmer than the norm and suitable for the survival of eggs.

In the Russian Federation, the weather conditions in winter and in March were generally favorable for the overwintering of locust eggs in all Federal Districts (FDs). In the Central FD, the average temperature in March varied from 2 to 10°C, rising to 18°C in some days. In the Southern FD, the average temperature was 7-19°C, with a minimum of 1°C and a maximum of 28°C. In the North Caucasus FD, the average temperature was 5-16°C, with a maximum of 26°C. In the Volga FD, the average temperature was 3-8°C, varying from -7 up to 15°C. In the Ural FD, the average temperature was -3 to 6°C, with a maximum observed of +12°C. In the Siberian FD, the average temperature varied from -4 to 5°C, with a minimum of -13°C and a maximum of +14°C. In the Far East FD, the average temperature varied from -5 to 4°C, with a minimum of -16°C and a maximum of +15°C.

Regarding **Central Asia**, the temperature was generally higher than the annual norm in Kazakhstan while in the other central and southern parts of the sub-region the temperature was above the norm during the first two decades, dropping down during the last decade of March.

In Afghanistan, the average daily temperature in March was 18-19°C, which is close to the annual norm, although there was an increase in temperature during the first two decades, followed by a sharp drop down of temperature and continuous rains during the last decade.

In Kazakhstan, the weather was variable in March, with temperature higher than the multiannual averages in most areas. In the South, the temperature was 1°C higher than the norm, with an average daily temperature from -3.5 to 20°C, a minimum of -19°C (at night) and a maximum of +27°C. The precipitations in the form of rain varied from 32 (Taraz) to 50 mm (Zhetysu). In the East, the weather was unstable, the average daily temperature was of 6°C (which is 4°C higher than the norm), with a minimum of -30°C and maximum of +14°C; precipitations in the form of snow were higher than the norm, with a height of snow cover reaching 80 cm in some areas (around Ridder). In the West, the weather was variable

and windy with sunny and rainy days; the daily temperature varied from -5°C to +15.4°C, and the average was lower than the norm for -0.5°C. The precipitations varied from 5 to 20 mm (Atyrau). In the North, the weather was variable with sunny, cool and cloudy days, precipitations and gusty winds. Average daily temperature was higher than the norm by 3°C, ranging from -24°C to +16°C. Precipitations ranged from 10 (Pavlodar) to 16.3 mm (Karaganda).

In southern Kyrgyzstan, in Jalal-Abad region, the average monthly temperature in March was close to the climatic norm and averaged 6-8°C in the valleys and 3-5°C in the foothills. The temperature at night was 0-11°C and at day time 8-22°C. The monthly precipitations were close to the norm and amounted from 33-35 mm (lowlands) to 87-122 mm in the foothills. In Chuy region, the average monthly temperature was also close to the norm and averaged 3-5°C (in the valleys) and 0-2°C (in the foothills). The temperature varied from 0 (at night) up to 21°C (during the day). The monthly precipitations were within the norm, ranging from 30-52 mm in the valleys to 43-61 mm in the foothills.

In Tajikistan, the weather during the first half of March was close to the climatic norm, however starting from 23 March the continuous rains in the lowlands and snow in the mountains resulted in a sharp drop in the temperature. The temperature varied from 1°C (at night) up to +25°C (daytime). The winter cereals in the valleys started booting and the sowing of spring crops began.

In Turkmenistan, the first and second decades of March were warm and without precipitations, however, the third decade was rainy and windy (with gusts up to 10-16 m/s). The average temperature at daytime was 13-24°C and at night 5-14°C. The winter crops were in their booting stage, and planting of cotton started on 26 March.

In Uzbekistan, similarly to other neighboring countries, the weather conditions during the first two decades of March were close to the norm, but lower temperature and higher rainfall were observed in most of its areas during the last decade of March.

Area treated in March 2025

Tajikistan	1282 ha
Uzbekistan	2039 ha
Total	3321 ha

Locust Situation and Forecast

(see also summary on page 1)

CAUCASUS

Armenia

- **SITUATION**

No survey or other activities related to locust management have been carried out so far.

- **FORECAST**

Based on the surveys conducted in 2024, where no CIT were recorded, low infestations are expected in 2025 too. Hatching of CIT may occur in early May in the areas where it could lay eggs.

Azerbaijan

- **SITUATION**

Spring egg-pod surveys started in the egg-laying sites. So far no hatching of any species has been observed.

- **FORECAST**

Warmer weather is expected in April, which would be favourable for hatching and hopper development, especially for DMA and CIT.

Georgia

- **SITUATION**

No locust field activities have started so far.

- **FORECAST**

It is planned to survey 250 000 ha in 2025 and the spring surveys will begin in early April. DMA hatching is expected by the end of the forecasted month while CIT hatching may occur in May. Forecasted treated areas against locusts in 2025 is of 20 000-30 000 ha, mainly against CIT and, to a far less extent, against DMA (about 1000-1500 ha against the latter).

Russian Federation

- **SITUATION**

Locusts in all regions were in embryonic diapause. Locust



egg-pod surveys were conducted in South and North-Caucasus FDs in March over 109 720 ha, including: 26 290 ha for DMA, out of which 6160 ha were found infested with an average density of 0.38 egg-pods/m²; 40 950 ha for CIT, out of which 3920 ha were infested with an average density of 0.62 egg-pods/m²; and 42 480 ha for LMI, with 140 ha infested and an average density of 9.17 egg-pods/m². In addition, 12 080 ha were surveyed for grasshoppers, out of which 5520 ha were found infested with an average density of egg-pods 0.74/m².

- **FORECAST**

According to the results of surveys conducted in 2024 and early 2025, the 2025 overall locust infestations are forecasted to be similar to those of 2024 in the historical breeding sites. However, based on the conducted population density assessment, an increase in locust populations is forecasted in some areas, such as Tambov, Orenburg, Samara, Ulyanovsk, Novosibirsk and Astrakhan regions, as well as in the Republics of Kalmykia, Chechnya, Mariy El, Tatarstan, Chuvashiya and Dagestan and Altay area. Hatching may start in April for DMA and during the first half of May for CIT and LMI.

CENTRAL ASIA

Afghanistan

- **SITUATION**

Locust hatching survey was conducted on 5688 ha during the last decade of March in four north and north-eastern provinces, i.e. Kunduz, Takhar, Baghlan, and Samangan; DMA hatching was observed on 3223 ha, where the average density varied from 422 to 541 hoppers/m². The first DMA hatching was reported on 23 March in Kunduz province, which is two weeks later than 2024.

- **FORECAST**

DMA hatching and hopper development will continue in April. Control operations will start from early April and may cover 35 000 to 40 000 ha during the 2025 campaign.

Kazakhstan

- **SITUATION**

Spring egg-pod surveys started in the southern regions, while preparations started in the northern, eastern and

western regions. Concerning DMA, a total of 54 370 ha were surveyed, out of which 14 734 ha were found infested, with the following average densities: up to 1 egg-pod/m² on 1997 ha, from 1.1 to 2 egg-pods/m² on 2313 ha, from 2.1 to 5 egg-pod/m² on 2804 ha and higher than 5 egg-pod/m² on 7620 ha. The number of eggs per pod varied from 16 to 34. From 2 to 40% of egg-pods were found infested by parasitoids or affected by diseases. Concerning CIT, a total of 21 105 ha were surveyed, out of which 1478 ha were infested, with a number of eggs per pod ranging from 16 to 43 and a percentage of infested egg-pods of 3.3 to 28.5%. No LMI survey was conducted during the reporting period.

- **FORECAST**

DMA hatching will start during the first days of April in Turkestan region and is expected to start at the beginning of the second decade of April in Zhambyl region. Spring surveys will begin in April in other regions and for other locusts.

Kyrgyzstan

- **SITUATION**

Spring surveys of locust egg-pods started in the southern regions. No DMA or CIT hatching has been observed so far.

- **FORECAST**

DMA mass hatching is expected during the first decade of April in Batken, Jalal-Abad and Osh regions. CIT hatching is expected during the third decade of April in Chui and Talas regions.

Tajikistan

- **SITUATION**

It is planned to conduct locust surveys on 653 962 ha in 2025, including 224 072 ha in spring for hatching and hoppers, 214 410 ha in summer for adults and egg-laying sites and 215 480 ha during autumn for egg-beds. The first hatching of DMA was recorded on 16 March in the south of Khatlon region, which is more than three weeks later than in 2024. However, hatching in Sughd region occurred during the same period that last year. By the end of the reporting period, DMA hatching had been reported from 11 districts of Khatlon region, six Districts of Republican Subordination (DRS) and five districts of Sughd region. No CIT hatching was observed. Chemical treatments against DMA were carried out on an area of 1282 ha which is six times less than in the same period of 2024 (8001 ha) using an insecticide with active ingredient (a.i.) alpha-cypermethrin 10% EC.



- **FORECAST**

DMA hopper development will continue in all above-mentioned regions in April while CIT hatching will begin in Sughd region during the second half of April.

Turkmenistan

- **SITUATION**

DMA spring surveys have been carried out so far on an area of 8557 ha, in the foothills of Akhal region (2451 ha), Balkan (1108 ha), Dashoguz (742 ha), Lebap (1462 ha) and Mary (2794). No DMA hatching has been observed so far.

- **FORECAST**

DMA hatching is expected during the first decade of April in Akhal, Balkan and Lebap regions, and during the third decade in Mary region.

Uzbekistan

- **SITUATION**

DMA hatching started on 20 March in Surkhandarya region, 21 March in Kashkadarya region and on 22 March in Jizzakh and Samarkand regions. At the end of March, DMA hoppers were in their first and second instars at an average density of 50 to 150 individuals/m² in hopper bands. No CIT nor LMI hatching was observed in historical breeding areas. By the end of the reporting period, 2039 ha were treated against DMA, including 1608 ha in Surkhandarya and 431 ha in Kashkadarya. The overall treated area was three times higher than in the same period of last year (615 ha had been treated in March 2024). Chemical pesticides with a.i. imidacloprid and lambda-cyhalothrin+imidacloprid were applied. Twenty-two tractor-mounted sprayers, 78 knapsack sprayers and eight vehicle-mounted ULV sprayers were used for treatments.

- **FORECAST**

DMA hopper development will continue in Surkhandarya and Kashkadarya regions. Hatching will continue in Jizzakh and Samarkand regions in early April, and will start later in other regions. CIT hatching will begin during the second half of April and early May in Jizzakh, Navoi, Samarkand and Tashkent regions.

Announcements

Locust warning levels. A color-coded scheme indicates the seriousness of the current situation for each of the three main locust pests: green for calm, yellow 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 threat (yellow), 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 CCA-Bulletins@fao.org. Monthly information received by the 1st of each month will be included in the CCA Locust Bulletin to be issued by first decade of the 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.

Events and activities in February and March 2025

- **FAO Team visits on implementation of the Locust Programme in CCA and the way forward**, for discussion with countries' counterparts and resource partners:
 - Turkmenistan: 24-25 February 2025
 - Uzbekistan: 26-28 February 2025
 - Kyrgyzstan: 24-26 March 2025
 - Kazakhstan: 26-28 March 2025
- **Hopper survey in Afghanistan** carried out on 23 March -4 April, in four Northern and Northeastern provinces, including in the border areas with Tajikistan and Uzbekistan.
- **Training sessions:**
 - **Training sessions on locust management** (delivered by FAO experts):
 - o **Afghanistan:** Training on monitoring and information management, including ASDC and CCALM, locust spraying and biopesticide use, held on 8-13 February



- in Mazar-i-Sharif for the benefit of 28 participants.
- o **Kazakhstan:** Training on monitoring and information management, including ASDC and CCALM, conducted on 31 March- 4 April in Shymkent for 17 participants.
- **ToT National and briefing sessions on locust management** (delivered by Master-Trainers):
 - o **Uzbekistan:** Four national sessions were held on 3-5 February in Karshi, Kashkadarya, 10-12 February in Gulistan, Syrdarya, 18-20 February in Fergana and 24-26 February in Nukus, Karakalpakstan for 72 participants.
 - o **Turkmenistan:** one national session on 3-7 March, Mary, and two briefing sessions on 17-18 March in Turkmenabad, Lebap, and on 24-25 March in Bakharden, Akhal, was attended by 47 staff.
- **Publications:**
 - **Newly published:**
 - o **PG on pesticide risk reduction for locust control in CCA (PG RR)** in Kazakh
 - o **DMA poster** in Kazakh
 - **Handed-over:**
 - o **To Afghanistan:** Practical Guidelines on the three locust pests in Caucasus and Central Asia (PG 3P) in English and DMA Poster in Dari.
 - o **To Kazakhstan:** PG RR in Kazakh.
- **Automated System for Data Collection (ASDC) and Caucasus and Central Asian Locust Management System (CCALM):**
 - **Annual Workshop on locust data collection, analysis, forecast and reporting in CCA (GIS Workshop)** held online on 13 March 2025, with more than 50 experts from CCA countries and FAO.
 - **Remote training on the use of the new ASDC Human Health and Environment (HH&ENV) Form** held online on 20 February with the participation of HH&Env Teams from five countries.
- **Human Health and Environmental Monitoring Teams:**
 - **Tajikistan:** as part of the first set of missions,

four missions were carried out on 19-22 February and 26 February-1 March in Vakhsh and Kulob, Khatlon, on 5-8 March in DRS and on 18-21 March in Sughd.

- **Uzbekistan:** On-the-job training delivered by the FAO Environmental Expert to six HH&Env Team Members on 10-14 March 2025, in Tashkent and Surkhandarya.
- **Procurement:**
 - **Equipment delivered/handed over:** tablets to Kazakhstan (GCP/INT/384/JCA).
 - **Procurement in progress:** pick-up vehicles for Turkmenistan, AChE Assay kits for Tajikistan (GCP/INT/384/JCA).
- **Annual Project Task Force (PTF 5) of project GCP/INT/384/JCA** held on 19 February, involving FAO Headquarters and Representations/Offices in CA countries on project implementation during the 2025 campaign.
- **Media/Visibility:** news published on the website “Locust Watch in CCA” (<http://www.fao.org/locusts-cca/en/>), press releases issued in Tajikistan, news reports on training sessions in Uzbekistan.

Forthcoming events and activities in April 2025

- **FAO Team visits on implementation of the Locust Programme in CCA and the way forward**, for discussion with countries’ counterparts and resource partners, scheduled as follows:
 - Georgia: 9-14 April 2025
 - Azerbaijan: 15-18 April 2025
- **Cross-border survey (CBS)** scheduled as follows:
 - Between Tajikistan (DRS and Khatlon) and Uzbekistan (Surkhandarya) on 7-12 April 2025.
 - Between Turkmenistan (Lebap) and Uzbekistan (Bukhara and Karshi) on 21-26 April 2025.
- **ToT National and briefing sessions** to be delivered by Master-Trainers):
 - **Kyrgyzstan:** two first sessions (out of four) are scheduled on 16-18 April in Jalal-Abad and 30 April-2 May in Batken.
- **Publications under preparation:**
 - **DMA and CIT posters** in Kazakhstan: in Kazakh (DMA, CIT) and in Russian (DMA).



- **LMI Posters** in Azerbaijan, Kazakhstan, Russian Federation, Turkmenistan and Uzbekistan: in national languages.
- **Human Health and Environmental Monitoring Teams:**
 - **Kyrgyzstan:** first mission (out of five) scheduled on 21-26 April in Jalal-Abad.
 - **Tajikistan:** as part of the second set of missions, two missions are scheduled on 15-19 April in Vakhsh and 25-28 April in Kulob, Khatlon.
- **Procurement:** ongoing, with expected delivery of AChE Assay kits to Tajikistan, and small amount of biopesticides to Kyrgyzstan and Tajikistan.