



Report of Monitoring, Early Warning and Assessment of Desert Locust

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Desert Locust Monitoring and Loss Assessment in Morocco, Algeria and Mauritania (June 2026)

Integrated with multi-source Earth Observation data, e.g. meteorological data, field data, and remote sensing data (such as MODIS in the US, etc), and self-developed models and algorithms for Desert Locust monitoring and forecasting, the research team constructed the 'Vegetation pests and diseases monitoring and forecasting system', which could regularly release thematical maps and reports on Desert Locust.

The remote sensing monitoring showed that, in June 2026, desert locusts mainly affected the central-southwestern regions of Morocco, localized western and central areas of Algeria, and southern Mauritania, affecting 104.2, 30.3, and 13.6 thousand hectares of vegetation, respectively. This month, the affected vegetation areas in Morocco and Algeria both increased compared with the previous month, while localized damage was also detected in southern Mauritania. Overall, gregarious spring breeding in Morocco gradually entered its final stage; hopper groups continued to fledge, forming numerous immature adult groups, and some adults dispersed eastward and southward. In Algeria and Mauritania, locust activity was dominated by low-density scattered populations, with localized groups. As green vegetation established earlier in Morocco gradually dried out, available food resources and habitat patches became increasingly fragmented, raising the likelihood of adult concentration and dispersal among the remaining green patches. Some mature adults may disperse eastward and southward along desert margins and scattered suitable habitat patches and, under favorable wind conditions, reach adjacent suitable areas. Algeria remained dominated by scattered hoppers and adults, with a few immature adult groups. Localized population activity may have been supported by nearby source replenishment and remnant vegetation in oases



and along desert margins. As spring breeding approaches its end, vegetation dries, and suitable habitats contract, some populations may disperse among the remaining green patches, with their activity range potentially extending toward inland and more southerly suitable areas. In southern Mauritania, activity was dominated by scattered adults. Localized rainfall in some areas improved near-surface soil moisture and grassland growth conditions, increasing local habitat suitability for adult resting, feeding, and potential breeding. However, suitable habitats remained generally patchy, and subsequent population changes will largely depend on the spatial and temporal distribution of rainfall and the persistence of vegetation. Over the next two months, gregarious spring breeding in Morocco and localized spring breeding in Algeria are expected to approach completion. Some mature adult groups may move east into eastern Morocco and western Algeria and continue small-scale breeding in suitable areas, while most locust populations may continue southward into Mauritania and other Sahel countries. As the seasonal rain belt gradually shifts northward, parts of Mauritania may increasingly develop conditions suitable for summer breeding. If rainfall continues and soil moisture and vegetation conditions improve further, the risk of localized population growth may rise. During this period, winter wheat and barley in Morocco are generally at the maturation-to-harvest stage; wheat and barley in Algeria are progressively entering the maturation-to-harvest stage; in southern Mauritania, sorghum and maize are at the land preparation and sowing to early seedling emergence stages, irrigated rice is entering the sowing stage, and natural pasture is beginning to green up with seasonal rainfall. Continued monitoring is required to prevent recurrent localized impacts on agropastoral production. The detailed results are as follows:

■ 1. Desert Locust Monitoring and Loss Assessment in Morocco

In June 2026, gregarious spring breeding in Morocco entered its final stage. Most hopper groups and hopper bands fledged successively, forming numerous immature adult groups over a broad area, while scattered hoppers and adults remained widespread. Under the combined effects of vegetation maintained by earlier abundant rainfall and its subsequent gradual drying, adults concentrated in the remaining green patches and dispersed outward, and the affected vegetation area increased by 18.0% compared with the previous month. As adults matured, a small proportion of mature groups may move east into suitable areas of eastern Morocco and western Algeria and continue localized breeding, while most groups may move along southern desert margins toward summer breeding areas such as Mauritania. Monitoring results showed that in June 2026, desert locusts affected 104.2 thousand hectares of vegetation in Morocco, including 12.2 thousand hectares of cropland, 20.2 thousand hectares of grassland, and 71.8 thousand hectares of shrubland (Figure 1), accounting for 0.16%, 0.29%, and 0.52% of the country's total cropland, grassland, and shrubland areas, respectively. Béni Mellal-Khénifra recorded the most extensive damage, with 41.7 thousand hectares of affected vegetation, followed by Marrakech-Safi with 32.0 thousand hectares. Souss-Massa, Drâa-Tafilalet, and Guelmim-Oued Noun were also affected, with 22.4, 6.5, and 1.6 thousand hectares, respectively.



Fig. 1 Monitoring of Desert Locust damage in Morocco (June 2026)

■ 2. Desert Locust Monitoring and Loss Assessment in Algeria

In June 2026, Algeria remained dominated by scattered hoppers and adults, with a few immature adult groups, and the affected area expanded compared with the previous month. As spring breeding approached its end and vegetation gradually dried, adults became more likely to disperse over short distances among suitable patches in oases and along desert margins. Some populations showed an overall tendency to move inland and southward, although conditions were not yet sufficient to support broad, continuous dispersal; locust conditions remained low-density, localized, and sporadic overall. Monitoring results showed that in June 2026, desert locusts affected 30.3 thousand hectares of vegetation in Algeria, including 8.4 thousand hectares of cropland, 9.7 thousand hectares of grassland, and 12.2 thousand hectares of shrubland (Figure 2), accounting for 0.55‰, 0.77‰, and 0.46‰ of the country's total cropland, grassland, and shrubland areas, respectively. Sidi Bel Abbès recorded the most extensive damage, with 11.4 thousand hectares of affected vegetation, followed by Saïda with 8.5 thousand hectares. Tlemcen, Aïn Témouchent, and Ghardaïa were also affected, with 6.3, 2.7, and 1.4 thousand hectares, respectively.



Fig. 2 Monitoring of Desert Locust damage in Algeria (June 2026)

■ 3. Desert Locust Monitoring and Loss Assessment in Mauritania

In June 2026, desert locust activity in southern Mauritania was dominated by scattered adults. During the first two-thirds of the month, localized rainfall occurred in parts of southern Mauritania, improving near-surface soil moisture and grassland growth conditions at some locations. However, rainfall was unevenly distributed and the rainy season was still in its early establishment phase; suitable habitats remained markedly patchy, and locust conditions were generally low-density, localized, and sporadic. Monitoring results showed that in June 2026, desert locusts affected 13.6 thousand hectares of vegetation in Mauritania, including 0.1 thousand hectares of cropland, 13.2 thousand hectares of grassland, and 0.3 thousand hectares of shrubland (Figure 3), accounting for 0.01%, 0.12%, and 0.06% of the country's total cropland, grassland, and shrubland areas, respectively. Hodh el Gharbi recorded the most extensive damage, with 11.6 thousand hectares of affected vegetation, followed by Guidimaka with 1.5 thousand hectares. Gorgol and Assaba were also affected, with 0.3 and 0.2 thousand hectares, respectively.



Fig. 3 Monitoring of Desert Locust damage in Mauritania (June 2026)

The analysis indicates that, over the next two months, gregarious spring breeding in Morocco and localized spring breeding in Algeria are expected to approach completion. Some mature adult groups may move east into eastern Morocco and western Algeria and continue small-scale breeding in suitable areas, while most locust populations may continue southward into Mauritania and other Sahel countries. As the seasonal rain belt gradually shifts northward, parts of Mauritania may progressively become suitable for summer breeding. If rainfall persists and soil moisture and vegetation conditions improve further, the risk of localized population growth may rise. Continuous monitoring of desert locust dynamics in Morocco, Algeria and Mauritania is recommended to prevent recurrent impacts on food crop growth and agropastoral production.

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