



Report of Monitoring, Early Warning and Assessment of Desert Locust

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Desert Locust Monitoring and Loss Assessment in Egypt, Saudi Arabia and Yemen (October 2025)

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 results showed that, in October 2025, desert locusts were primarily distributed along the upper Nile Valley corridor and adjacent areas in Egypt, the southwestern Red Sea coastal zone and neighbouring mountains in Saudi Arabia, and the western Red Sea coast and southern Gulf of Aden coast in Yemen, affecting 15.3, 17.1, and 18.7 thousand hectares of vegetation, respectively. Over the next two months, desert locust activity is expected to remain at generally low levels. In Egypt, the lack of continuous rainfall in the upper Nile Valley will not be favourable for sustained breeding, and locusts will mainly persist as isolated adults. In southwestern Saudi Arabia, localized rainfall along the Red Sea coast and adjacent mountain foothills may allow small-scale supplementary breeding, but overall population levels will remain low. In Yemen, green vegetation along the western Red Sea and southern Gulf of Aden coasts will support small numbers of adults and hoppers; as vegetation in the interior continues to dry, locust activity will be largely confined to short-distance movements along the coastal belts, making large-scale migration unlikely. As this period coincides with the main planting and growing seasons for food crops in Egypt and Saudi Arabia, and the major harvest season in Yemen, continued monitoring of desert locust dynamics is essential to prevent recurrent losses in crop growth and agricultural and pastoral

production. The specific results are as follows:

■ 1. Desert Locust Monitoring and Loss Assessment in Egypt

In October 2025, the eastern Red Sea coast of Egypt remained mostly dry, with fragmented green vegetation that was not conducive to the formation of dense hopper bands. In contrast, light rainfall in the interior improved vegetation growth, and desert locusts were mainly distributed along the upper Nile Valley corridor and adjacent areas. Monitoring results showed that, in October, desert locusts affected 15.3 thousand hectares of vegetation in Egypt, including 4.9 thousand hectares of cropland, 7.1 thousand hectares of grassland, and 3.3 thousand hectares of shrubland (Figure 1), accounting for 0.13%, 0.52%, and 0.41% of the country's total cropland, grassland, and shrubland areas, respectively. Aswan recorded the most extensive damage, with 6.6 thousand hectares of affected vegetation, followed by Qena with 4.9 thousand hectares; New Valley was also affected, with 3.8 thousand hectares.



Fig. 1 Monitoring of Desert Locust damage in Egypt (October 2025)

■ 2. Desert Locust Monitoring and Loss Assessment in Saudi Arabia

In October 2025, rainfall continued to decrease across the central part of Saudi Arabia, making conditions unsuitable for desert locust survival and driving locusts to move from Ar Riyad toward Makkah. Meanwhile, the southwestern Red Sea coastal zone and neighbouring mountains experienced several rainfall events and phase-wise greening, which supported oviposition and reproduction and led to a modest increase in numbers. Monitoring results showed that, in October, desert locusts affected 17.1 thousand hectares of vegetation in Saudi Arabia, including 2.2 thousand hectares of cropland, 5.4 thousand hectares of grassland, and 9.5 thousand hectares of shrubland (Figure 2), accounting for 1.00%, 0.27%,

and 0.23% of the country's total cropland, grassland, and shrubland areas, respectively. Jizan recorded the most extensive damage, with 9.9 thousand hectares of affected vegetation, followed by Al-Baha with 3.8 thousand hectares; Makkah and Asir were also affected, with 2.0 and 1.4 thousand hectares, respectively.

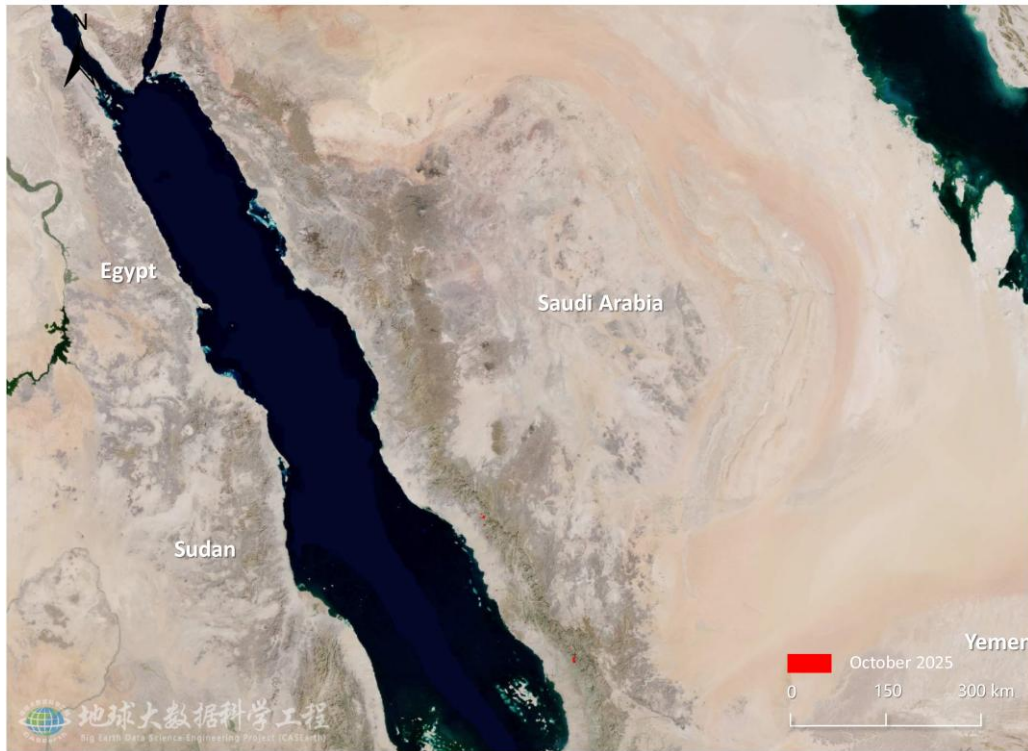


Fig. 2 Monitoring of Desert Locust damage in Saudi Arabia (October 2025)

■ 3. Desert Locust Monitoring and Loss Assessment in Yemen

In October 2025, desert locusts in Yemen were mainly distributed along the western Red Sea coast and the southern Gulf of Aden coast. The relatively abundant rainfall and better vegetation conditions in these areas, compared to the interior, formed a continuous coastal belt of suitable habitat and provided favourable conditions for oviposition and reproduction. Monitoring results showed that, in October, desert locusts affected 18.7 thousand hectares of vegetation in Yemen, including 5.5 thousand hectares of cropland, 5.2 thousand hectares of grassland, and 8.0 thousand hectares of shrubland (Figure 3), accounting for 1.12%, 0.13%, and 0.15% of the country's total cropland, grassland, and shrubland areas, respectively. Al-Hudaydah recorded the most extensive damage, with 8.6 thousand hectares of affected vegetation, followed by Ta'izz with 3.4 thousand hectares; Abyan, Lahij and Hadramawt were also affected, with 2.8, 2.3 and 1.6 thousand hectares, respectively.



Fig. 3 Monitoring of Desert Locust damage in Yemen (October 2025)

The analysis indicates that, over the next two months, desert locust activity in Egypt, Saudi Arabia and Yemen will remain at generally low levels. In the upper Nile Valley of Egypt, the absence of continuous rainfall will not support sustained breeding, and locusts will persist mainly as scattered adults. In southwestern Saudi Arabia, localized rainfall along the Red Sea coast and adjacent mountain foothills may support small-scale breeding, but the overall population baseline will remain low. In Yemen, green vegetation along the western Red Sea and southern Gulf of Aden coasts will support small numbers of adults and hoppers; as vegetation in the interior continues to dry, locust activity will be largely confined to short-distance movements within the coastal belts, and no large-scale migration is anticipated. Continuous monitoring of desert locust dynamics in Egypt, Saudi Arabia and Yemen is essential to prevent repeated losses in crop growth and agricultural and pastoral production.

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