

FOOD AND
AGRICULTURE
ORGANIZATION
OF THE

ORGANISATION
DES NATIONS
UNIES POUR
L'ALIMENTATION
ET L'AGRICULTURE

ORGANIZACION
DE LAS NACIONES
UNIDAS PARA
LA AGRICULTURA
Y LA ALIMENTACION

منظمــة الأغذيــة والزراعــة للأمــم المتحــدة

Via delle Terme di Caracalla, 00100 Rome, Italy

Cables: FOODAGRI ROME

Telex: 610181 FAO I

Telephone: 57971

AGP Division

Locusts, other migratory pests and emergency operations group

DESERT LOCUST SITUATION SUMMARY AND FORECAST

NO. 84 AUGUST-EARLY SEPTEMBER 1985

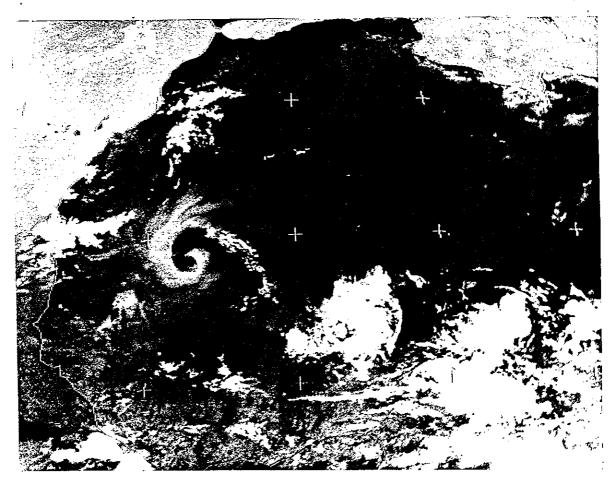
SUMMARY

The overall Desert Locust situation remains calm. There have been locally good rains in many parts of the summer breeding areas. Breeding has already been reported from Ethiopia, Saudi Arabia and India, and is likely to result in larger numbers of adults than have been recorded in the past year.

WEST AFRICA

Meteorology

As reported in Summary No. 83 there were significant rains during the first two decades of August associated with interactions between the ITCZ and Mediterranean depressions. During the third decade the amount of rain was somewhat reduced, according to Meteosat imagery, but a technical fault prevented the transmission of any GTS data via the Centre Régional de Télécommunications (CRT) in Paris for the period 25-30 August. The absence of GTS data also prevented analysis of the wind field associated with a sand storm showing remarkable swirling motion centred at 18 N 8 W on 29 August.



Meteosat infra-red imagery at 16:00 hours GMT, 29 August showing a sand storm with a remarkable swirling motion.

The first signs of the sand storm were clearly seen on 28 August, while the imagery of 30 August showed the thermoconvective phase which followed.

There were further significant rains in the first fortnight of September: Nema received 27 mm on 1 September, on 2 September Bilma reported 21 mm, Gao 17 mm and Rosso 13 mm. On 7 September Agadez reported 18 mm; on the same day cyclogenesis developed along the ITCZ near the Cape Verde Islands and resulted in 47 mm of rain at Sal. Atar reported 17 mm on 11 September. There were also thermoconvective rains in the vicinity of the Adrar des Iforas but station totals are not yet available.

Midday temperatures ranged from 30° to 40° C in the interior and from 25° to 30° C in coastal areas.

Breeding conditions

NOAA-AVHRR imagery indicated that there were several areas where breeding conditions were favourable in late August, following the rains of June, July and early August. These included Western Hodh up to 17 N in Mauritania, east of Timbuktou and Wedi Edjerer in the Adrar des Iforas in Mali, and, most notably, the plain of Talak in western Air in Niger. Eastern Chad north to 15 N was also green.

Locusts

There have been no reports of Desert Locusts. There has been a serious upsurge of <u>Oedaleus senegalensis</u> in the Nara-Dilly area of north-west Mali.

NORTH-WEST AFRICA

Meteorology

Some locally thundery cold fronts from the Atlantic affected the Maghreb from west to east, but according to GTS data rainfall did not exceed 8 mm in 24 hours.

Several northward "pulls" of the ITCZ were detected on Meteosat imagery in late August and early September from the vicinity of the Adrar des Iforas, where there were thermoconvective rains. From 7 September onwards further

Atlantic disturbances moved from Morocco towards Algeria but according to the GTS there was little rain as a result of the frontolytic effect of ridges associated with the Azores anticyclone.

Maximum temperatures ranged from $45^{\circ}\mathrm{C}$ in the interior to $30^{\circ}\mathrm{C}$ along the Hediterranean coast and $25^{\circ}\mathrm{C}$ along the Atlantic coast.

Breeding conditions

According to NOAA/AVHRR imagery there were no significant areas providing favourable breeding conditions.

Locusts

There were no reports of locusts.

EASTERN AFRICA

Meteorology

In Sudan the ITCZ continued to oscillate around 15 N. Meteosat imagery showed large masses of unstable thermoconvective clouds which resulted in good rains up to this parallel. Thermoconvective clouds also extended over Ethiopia to northern Somalia and across the Red Sea to south-west Arabia. Amongst significant falls of rain reported by the GTS were: 22 mm at Awash on 1 August, 21 and 42 mm at Bahar Dar on 3 and 5 August respectively, 21 mm at Addis Ababa on 8 August, 28 mm at Makale on 14 August, 37 mm at Gondar on 16 August, 20 mm at Asmara on 27 August and 47 mm at Makale on 1 September. No GTS data are available from Sudan or Somalia and, while there were significant rains over the interior of Djibouti, the synoptic network is inadequate to confirm them.

Maximum daily temperatures ranged from 42 $^{\rm O}{\rm C}$ in Khartoum to 15 $^{\rm O}{\rm C}$ in the highlands of Ethiopia.

Breeding conditions

According to NOAA/AVHRR imagery conditions in the Desert Locust recession area were favourable for breeding in Kassala Province of Sudan up to 14° N, west and north-west of Massawa in Ethiopia and around Mait on the northern coast of Somalia.

Locusts

ETHIOPIA

There was an unconfirmed report of a swarm at CamCeua (1625 N/3845 E) on 2 August. This subsequently proved to consist of low density infestations of late instar hoppers and fledglings over an area of 600 hectares. Control operations by Exhaust Nozzle Sprayer commenced during the second decade of August and were concluded on 28 August.

SUDAN

In July scattered yellowish adults were found at El Dour (1935 N/3426 E), Melit (1408 N/2533 E) and copulating adults were found at Kutum (1413 N/2439 E) on 10 July at a density of 500 per hectare. On 29 July mature adults at 360 per hectare were found on an area of 60 hectares at 1817 N/3555 E between Musmar and Haiya.

NEAR EAST

Meteorology

A major feature of the period was the frequent occurrence of thermoconvective clouds over South-West Arabia and the southern Red Sea. These gave some very heavy rains. Taiz reported 145 mm on 17 August, 138 mm on 31 August while on 8 September the instability moved north-west and Jizan reported 141 mm. Daily station totals for Yemen AR and Yemen PDR have been requested.

Oman was frequently affected by oceanic-continental interactions associated with Indian Ocean depressions but in coastal areas daily rainfall was generally less than 3 mm.

Daily maximum temperatures ranged from $47^{\circ}\mathrm{C}$ in the interior to $35^{\circ}\mathrm{C}$ in coastal areas.

Breeding conditions

According to NOAA/AVHRR imagery up to 20 August only the highlands of Yemen AR provided suitable breeding conditions.

Locusts

SAUDI ARABIA

Hoppers and adults were reported from Najran on 11 September.

There were no other reports of locusts from the Region.

SOUTH-WEST ASIA

Meteorology

The monsoon depression was often fragmented and this multicellular aspect resulted in very typical rainfall distribution. As reported in Summary No. 83, there were widespread heavy rains in the Tharparkar, Nara and Cholistan deserts and in Karachi, Lasbela and Khuzdar areas. Chhor reported 39 mm on 4 August and 81 mm for the first half of August while Bahawalpur recorded 65 mm for the same period, Barmer 68 mm, Jaisalmer 21 mm, Jodhpur 45 mm, Ganganagar 18 mm, Sikar 66 mm, Bikaner 19 mm, Bhuj 89 mm and Deesa 169 mm.

• In the first half of September rainfall decreased in the summer breeding areas.

Maximum daily temperatures ranged from about $40^{\circ}\mathrm{C}$ in the interior summer breeding areas to about $30^{\circ}\mathrm{C}$ in coastal areas.

Breeding conditions

Breeding conditions were reported to be generally favourable in the `—summer breeding area in the first half of August.

Locusts

PAKISTAN

In the first half of August a total of 42 adults were seen in 15 localities in Uthal, Mirpurkhas, Sukkur and Bahawalpur districts.

INDIA

In the first half of August, scattered adults were found at 13 localities in Jaisalmer and Bikaner districts, the maximum density being 450 per square kilometre at Babla (2746 N/7123 E) on 7 August and at Raichandwala (2746 N/7141 E) on 8 August. One third instar hopper was collected at Babla on 7 August.

No locusts were reported from AFGHANISTAN and IRAN.

FORECAST FOR OCTOBER-NOVEMBER 1985

There have been localised good rains in many parts of the summer breeding area so that Desert Locust numbers are likely to show a considerable increase on the very low levels recorded in recent months. Adults will move to traditional winter-spring breeding areas during the forecast period and limited winter breeding may commence in Red Sea coastal areas.

In <u>South-West Asia</u> summer breeding will terminate in the Tharparkar, Khipro, Nara and Cholistan deserts and in Lasbela district in Pakistan and in Rajasthan in India. Small numbers of adults will be produced and some of these will migrate to Baluchistan in Pakistan and a few may reach coastal areas of Baluchistan-Seistan in south-east Iran.

In the <u>Near East</u> widely scattered but small scale breeding may continue in the interior of south-west Arabia and may commence in coastal areas along the Red Sea and Gulf of Aden towards the end of the forecast period. A few adults may reach eastern Oman and the United Arab Emirates.

In Eastern Africa widely scattered but small scale breeding in the interior of Sudan will terminate, and adults will start to accumulate in coastal areas, particularly those which have received summer floods. In northern Ethiopia breeding is likely to continue in sub-coastal plains and wadis and may extend to the coastal plains. In north-west Somalia small scale breeding is likely to occur on the coastal and sub-coastal plains.

In <u>West Africa</u> widely scattered initially low density breeding is likely to occur in Hodh, Tagant and Adrar in Mauritania, in the Adrar des Iforas and Tamesna of Mali, and in Tamesna and western Air in Niger and some small groups of hoppers and adults may occur if there is a second generation of breeding.

In North-West Africa there may be small scale low density breeding in the extreme south of Algeria. Small numbers of adults may reach central and western Algeria and even south-east Morocco during the forecast period.

Rome

