联合国粮食及农业组织
FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS
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AGP Division

Locusts, other migratory pests and emergency operations group

DESERT LOCUST SITUATION SUMMARY AND FORECAST

No. 68 APRIL - EARLY MAY 1984

SUMMARY

The situation remained generally calm. The largest reported populations were in Baluchistan of Pakistan where limited preventive control operations were undertaken against early instar hoppers. Elsewhere scattered adults were reported from India and the People's Democratic Republic of Yemen. After a prolonged drought, moderate to heavy rains fell over parts of Ethiopia, Djibouti, the Horn of Africa and south-west Arabia.

W/Q 9021

DESERT LOCUST SITUATION, APRIL - EARLY MAY 1984

WEST AFRICA

Meteorology

The Intertropical Convergence Zone (ITCZ) progressed irregularly from about 10°N to about 15°N and was not very active. There were some violent thunderstorms, for example at Gaya which received 18 mm of rain on 8 April. Sandstorms were associated with the progression of the ITCZ. On 23 April N'Djamena received more than 45 mm of rain following light rain on 13 April. A further 10-15 mm of rain fell on 28 April.

According to GTS data rains were heavier south of 10°N. For example, 61 mm fell at Sokode and 92 mm at Bouake on 22 April. Fada N'Gourma received 46 mm on 25 April and Kenieba reported 60 mm on 29 April. On the same day there was light rain at Nema and Aioun El Atrouss according to GTS data and according to OCLALAV, Aioun recorded 25 mm during the month. On 7 May there were good rains up to 14°N; 32 mm were recorded at Tahoua and 50 mm at Kita.

Maximum temperatures were frequently around 40°C, and even more north of the ITCZ.

Breeding conditions

According to NOAA/AVHRR imagery conditions were unfavourable for breeding throughout the recession area in West Africa.

Locusts

No locusts were reported.

NORTH-WEST AFRICA

Meteorology

During the first decade of April, several, sometimes stormy, depressions coming from the Atlantic crossed the Maghreb, but according to GTS data associated rainfall did not exceed 12 mm daily. During the second decade there were heavier rains locally, Taza recorded 18 mm on 14 April while Bejaia recorded 50 mm and 77 mm on 16 and 17 April respectively. In the last decade the most significant rain fell in Morocco; for example on 29 April Al Hoceima received 16 mm, Rabat 18 mm and Beni Mellal 25 mm, while Rabat recorded 43 mm on 30 April. Further rain was reported in the first decade of May; Fez recording 28 mm on 10 May.

Several duststorms accompanied by strong winds, characteristic of cold fronts, occurred, mainly in Libya but also in Algeria. There were considerable variations in daily maximum temperatures, depending on the origins of the air masses. In coastal areas during northerly winds the temperatures reached 17°C, while during periods of southerly winds they reached 23°C, and exceeded 30°C in coastal areas of Libya. In the interior temperatures reached or exceeded 35°C.

Breeding conditions

According to NOAA/AVHRR imagery for 21 - 30 April conditions for breeding had become less favourable in Libya and were unfavourable in the recession area in Algeria.

Locusts

No locusts were reported in April. MOROCCO was clear in March.

EASTERN AFRICA

Meteorology

Synoptic data for Sudan continued to be fragmentary. However, using aviation data METAR and infra-red Meteosat imagery simultaneously it can be stated that the weather continued dry and very hot in central and northern areas, with maximum temperatures frequently exceeding 40°C. Sand and dust storms were observed in the vicinity of Khartoum. In southern Sudan satellite imagery showed relatively abundant cloud capable of producing local rains.

DLCO-EA reported there was no rain in the coastal winter-spring breeding areas of Ethiopia, Djibouti or Somalia during the period 1 - 20 April. In adjacent areas, the GTS recorded the following rains: 26 mm and 19 mm at Asmara on 9 and 16 April respectively, 13 mm at Jimma on 3 April, 4 mm and 7 mm at Awassa on 15 and 16 April respectively. Daily maximum temperatures ranged from 17° to 37° due to the effects of relief and air-sea-land interactions. Meteosat imagery, however, showed cumulo-nimbus clouds which would have given appreciable rain over and to the north of the coastal escarpment on 11, 12, 13, 14, 20, 22 and 30 April. Further south there were more intense thunderstorms, Nairobi for example recording 61 mm on 16 April and Tanga 104 mm on 24 April.

In May Meteosat infra-red imagery indicated that there were widespread moderate to heavy rains over Ethiopia, Djibouti and the Horn of Africa. According to the GTS Diredawa recorded 34 mm on 12 May and Djibouti 104 mm on 19 May though this latter figure is suspect.

Midday temperatures were about or above 38°C at Lodwar, Mandera, Belet Uen and Garissa, but were appreciably lower in highland areas.

Breeding conditions

According to NOAA/AVHRR imagery for 1 - 30 April there were still favourable breeding conditions north-west of Massawa and between Mait and Bosaso, but by 1 - 10 May the area north-west of Massawa was drying out.

Locusts

No locusts were reported.

NEAR EAST

Meteorology

The Red Sea Convergence Zone was located in the vicinity of 20°N and cloud masses associated with it were detected on Meteosat imagery on 9 and 14 April and again from 28 April. Information from the FAO Regional Locust Officer, confirmed by GTS data provided the following information about rainfall: after scattered light rain during the first decade, 21 mm and 74 mm of rain were reported at Medina on 13 and 14 April, during thunderstoms, while other rain fell at Riyadh, Hail, in the Asir, Taif, Mecca and Jeddah. On 21 April the GTS reported 21 mm at Hail and Meteosat imagery confirmed the presence of important cloud masses. On the other hand from 23 April Meteosat detected a quasi-permanent line of cumulo-nimbus cloud parallel to the Tihama. The GTS confirmed the report of the FAO Locust Officer, Aden of some thundery rain extending to the borders of the Yemen Arab Republic during this period. From 8 May Meteosat IR imagery suggested there were moderate to good rains over south-west Arabia.

The GTS also reported some scattered light rain on coastal areas along the Persian Gulf between Kuwait and the Sultanate of Oman. Meteosat infrared imagery confirmed the presence of rainy weather. Some sandstorms were observed and strong winds were associated with depressions, fronts and troughs, thermal and dynamic in origin.

Maximum daily temperatures frequently reached 30°C and even 35°C, mainly in the Yemen PDR and the Sultanate of Oman.

Breeding conditions

Conditions were not favourable for breeding in western and southern coastal areas up to 10 May according to NOAA/AVHRR imagery.

Locusts

PEOPLE'S DEMOCRATIC REPUBLIC OF YEMEN

Small numbers of isolated solitary adults were observed in Wadi Fajrah (1259N/4418E) on 9 April and isolated adults were seen in the Dhubyah (1512N/5108E) area of Wadi Marsila on 26 April.

IRAQ, YEMEN ARAB REPUBLIC, KINGDOM OF SAUDI ARABIA were reported clear during April.

SOUTH-WEST ASIA

Meteorology

In the total absence of GTS data from Iran, Meteosat imagery remains the sole source of information in real time. Infrared imagery showed numerous cloud masses, which were certainly accompanied by rain, in particular on 8, 11, 14, 17, 18, 23 and 29 April and again between 2 and 8 May.

According to the GTS data several thundery showers occurred at the beginning of April, moving towards northern Pakistan and India. They were accompanied by sand-storms.

There were light showers in the Kharan, Nushki, and Uthal areas during the first fortnight of April and in the Khuzdar, Kharan, Nushki, Turbat and Bahawalpur in the second fortnight. There were further light rains in the second week of May in Baluchistan. In India there were light rains in Rajasthan during April.

Maximum daily temperatures in the summer breeding areas frequently exceeded 40°C but were generally between 30° and 40°C in the spring breeding area.

Breeding conditions

According to NOAA/AVHRR imagery and reports from Pakistan Plant Protection Department conditions were generally rather dry in the spring breeding areas.

Locusts

PAKISTAN

Scattered adults were seen in 68 localities in Uthal, Turbat, Pasni, Panjgur, Quetta, Khuzdar, Nushki and Kharan districts during the first half of April, the maximum density being 3000 per square kilometre at Rumra on 11 April. In the second half of April there were again widespread scattered adults in the same areas, the maximum density being 2250 per square kilometre at Kasan Koori on 22 April.

Scattered adults were also present in the first half of May and preventive control was undertaken against first to third instar hoppers over 1.5 square kilometre at Hurmagai (2817N/6427E) in Kharan district using 25 kg 12.5% BHC.

INDIA

Small numbers of scattered adults were seen at 7 localities in Bikaner, Jaisalmer and Banaskantha districts of Rajasthan and Gujarat in the second half of April, the maximum density being 300 per square kilometre at Nokh (2734N/7215E) on 24 April.

No locusts were reported from AFGHANISTAN or IRAN.

FORECAST FOR JUNE - JULY 1984

The forecast period is one of major redistribution of adults and is marked by the onset of summer (monsoon) breeding. Population levels have been low in early 1984 except in Pakistan but if there are widespread and prolonged summer rains, particularly in West Africa and Indo-Pakistan, gregarious populations could reappear from August.

In South-West Asia spring breeding in coastal areas and inland valleys of Baluchistan of Pakistan and possibly in south-eastern Iran will terminate. New generation adults will migrate to the summer breeding areas in the Cholistan, Nara and Tharparkar deserts of Pakistan and Rajasthan in India. Initially low density breeding will commence in areas receiving early monsoon rains.

In the Near East small scale breeding is likely to occur in coastal and interior areas of Yemen PDR which received rain in May and there may be local breeding in interior areas of south-west Saudi Arabia and Yemen AR which have received rains and or floods. Small numbers of adults are likely to persist along the Tihama and in widely scattered interior areas.

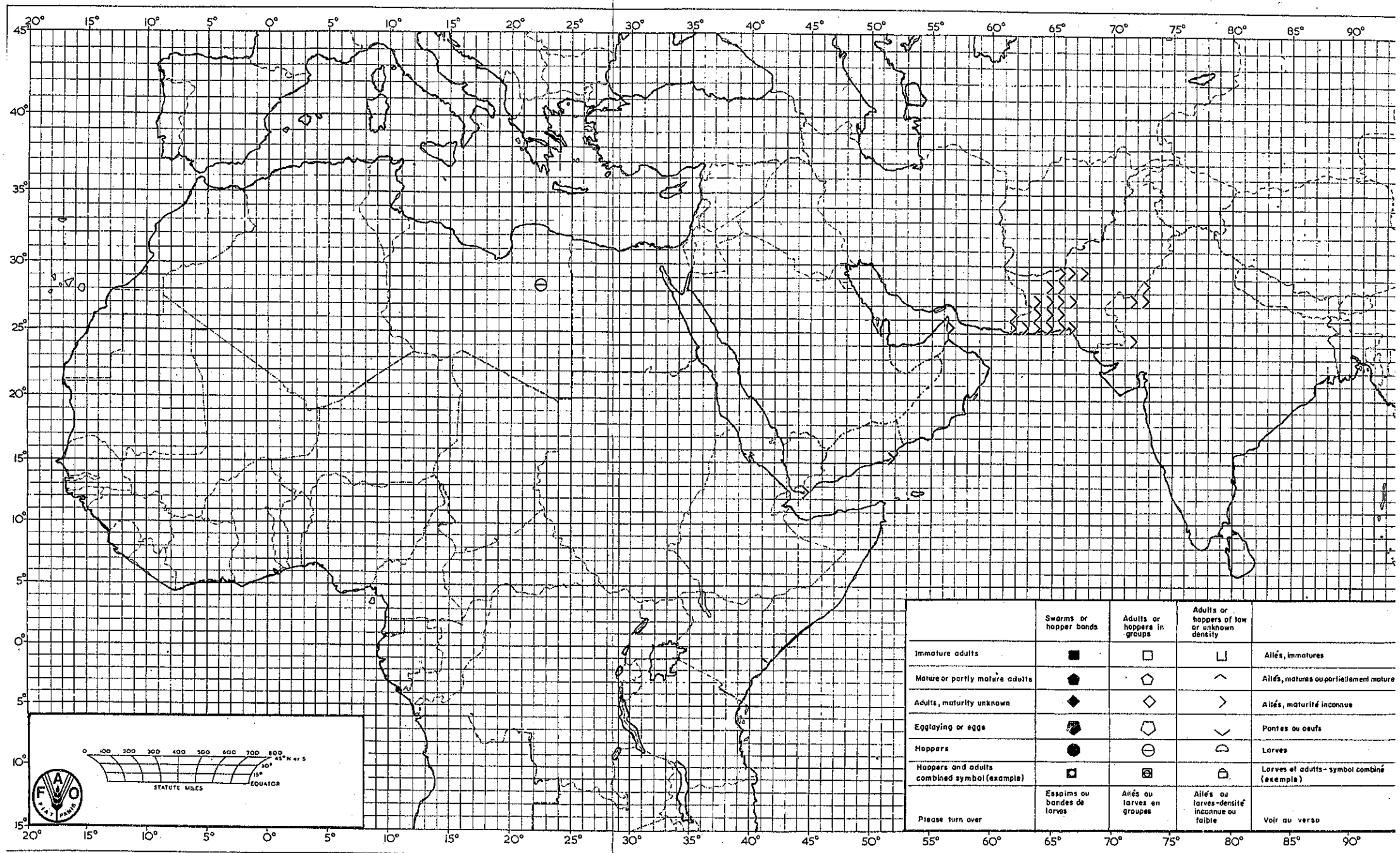
In Eastern Africa low density breeding, possibly widespread, will occur in the interior of Sudan and possibly the western lowlands of Eritrea in northern Ethiopia. Small numbers of adults are likely to be present on the coastal and subcoastal plains of northern Somalia.

In North-West Africa small scale low density breeding may occur in Libyan oases and in wadis draining Saharan uplands

In West Africa numbers of adults are low but these could be concentrated into a few relatively small areas by the oscillations of the ITCZ and if the early monsoon rains are restricted in extent. Breeding is likely to commence; most will be at low density but groups could form in areas where adults have concentrated.

Rome, 28 May 1984

It is regretted that for technical reasons no map accompanies this summary.



	Swarms or hopper bands	Adults or hoppers in groups	Adults or hoppers of low or unknown density	
Immature adults	■	□	⊔	Ailés, immatures
Mature or partly mature adults	⬟	⬠	⌒	Ailés, matures ou partiellement mature
Adults, maturity unknown	◆	◇	›	Ailés, maturité inconnue
Egglaying or eggs	⬟	⬠	⌄	Pontes ou oeufs
Hoppers	●	⊖	⌓	Larves
Hoppers and adults combined symbol (example)	◘	⊡	⌂	Larves et adults - symbol combiné (exemple)
Please turn over	Essaims ou bandes de larves	Ailés ou larves en groupes	Ailés ou larves-densité inconnue ou faible	Voir au verso