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## Locusts, other migratory pests and emergency operations group

### DESERT LOCUST SITUATION SUMMARY AND FORECAST

No. 56 APRIL - EARLY MAY 1983

#### SUMMARY

Small-scale preventive control operations were mounted against hoppers in Pakistan during April, while aerial and ground spraying was undertaken against adults along the northern Red Sea coast of Ethiopia in late March.

Small numbers of adults were reported from Somalia, People's Democratic Republic of Yemen, Pakistan and India.

W/Q3183

## DESERT LOCUST SITUATION, APRIL - EARLY MAY 1983

### WEST AFRICA

#### Meteorology

The Intertropical Convergence Zone (ITCZ) moved somewhat irregularly towards the Sahel due to the presence of several waves. At the end of April its mean position was about 13°N. The regime of the monsoon was very variable from one day to another with local thundery rains which produced for example 12 mm at Dédougou on 18 April, 33 mm at Bobo Dioulasso on 20 April and 11 mm at Boromo on 26 April (information supplied by the ASECNA Principal Meteorological Centre at Ouagadougou).

The harmattan was very hot and dry and locally accompanied by dust. In Mauritania scattered light rain was frequently recorded in association with Atlantic disturbances; according to GTS data the intensity of the rain rarely exceeded 1 mm in 6 hours. South of the ITCZ maximum temperatures ranged from 29 to 35°C during stormy and rainy periods and from 36 to 46°C during dry periods. To the north maximum temperatures rose from about 30° at the beginning of April to around 40°C at the end of the month.

#### Breeding conditions

The NOAA/AVHRR vegetation index imagery coverage of April/early May for Mauritania, northern Senegal, southern Morocco, Western Sahara, northern Mali/Niger indicates that the potential for breeding in the region was very low during this period due to the absence of any green areas.

#### Locusts

No locusts were reported in March or April.

### NORTH-WEST AFRICA

#### Meteorology

Temperate latitude Atlantic disturbances were less active by the time they reached the countries of the Maghreb, and although there was frequent rain it was not important. From time to time a weak depression from the Canary islands affected Morocco. Amongst the more important rains recorded were: 11 mm at Tripoli on 1 April, 14 mm at Agadir on 18 April, 16 mm at Annaba (Bône) on 23 April, 16 and 4 mm at Tindouf on 23 and 24 April, 13 mm at Adrar on 25 April, 6 mm at Agadir on 30 April which extended towards Bechar.

Midday temperatures fluctuated between 20 and 30°C in the north of the Maghreb but frequently ranged between 35 and 40°C in the Sahara.

#### Breeding conditions

No vegetation index imagery coverage was available for this region after 21 March when the imagery for central Algeria indicated that breeding potential between 22°-30°N and 0°-10°E was low.

### Locusts

No locusts were reported from the Region during April. LIBYA was reported clear in March.

## EASTERN AFRICA

### Meteorology

A letter from the Director of the Kenya Meteorological Department provided information additional to that supplied via the GTS on the northward movement of the ITCZ (over Tanzania in February and March) towards Kenya, where its arrival was forecast for April. Rains associated with the ITCZ occurred throughout these areas whereas previously rainfall had been localised.

DLCOEA reported heavy rains in and around Hargeisa, which recorded 58 mm during the first decade of April, 30 mm during the second and 26 mm during the third. In Ethiopia heavy rains were recorded at Diredawa on 2, 7 and 8 April; decade totals were 47 mm, 32 mm and 45 mm. 24 mm were reported at Addis Ababa on 7 April and Jimma recorded 34 mm on 17 April.

### Breeding conditions

The NOAA/AVHRR vegetation index imagery coverage of April/early May for Ethiopia and Somalia showed that there had been a good vegetation response over substantial areas from the widespread rains during March in the region. Large areas with green vegetation were observed on the coastal plains of northern Somalia and Djibouti. Many smaller green areas were observed in the Rift Valley in Ethiopia in the railway area and the Danakil Depression. The coastal plains of Eritrea were observed to be extremely dry in mid April and were obscured by cloudcover in early May. Good rains had created very good vegetation conditions in large parts of the Ogaden and southern Somalia.

### Locusts

#### SOMALIA

According to a late report from DLCOEA a ground team surveyed the northern Somali coast between Berbera and Bossaso between 9 and 20 March. Solitarious adults were seen at several localities along the coast, in particular at Bender Ziada (1115N/4858E), Elayu (1115N/4855E), Durdureh (1118N/4835E), Las Sukard (1105N/4738E), Wadi Okraut (1106N/4732E) and between Raguda (1012N/4636E) and Berbera. The maximum density was 29 in a one kilometre traverse near Durdureh.

From 21-24 March a ground team surveyed the northern Somali coast between Berbera and Zeita. Immature solitarious adults were flushed by vehicle at Heiro (1025N/4448E), and between Saba Wanah (1006W/4406E) and Lukhaya.

These areas were reported to be clear of locusts in April but no surveys were reported.

## ETHIOPIA

According to a late report from DLCOEA, target and barrier ground and aerial spraying operations were undertaken between Massawa and Messa Gulbub from 21 to 25 March against dense infestations of adults. 1225 litres of 20% dieldrin, 726 litres of 10-20% BHC and 182 litres of 96% fenitrothion were applied.

The Eritrean coast was reported to be clear of locusts in April but no surveys were reported.

No locusts were reported from other countries in the Region.

## NEAR EAST

### Meteorology

Most of the Arabian peninsula lay between the weak Red Sea depression and the continental anticyclone (1015 mh), a residue of winter high pressures. There were thunderstorms along the southern Tihama, as far north as Jeddah particularly on 18, 21 and 24 April. Recorded rainfall ranged from 1 to 8 mm. The rains extended inland as far as Sulayil, which recorded 7 mm on 23-24 April.

In Yemen PDR widespread heavy rain was reported from Dathina, Shabwah and the wadi Hadhramaut during the second week of April.

In eastern Arabia there were numerous thunderstorms which, according to GTS data, resulted in 101 mm at Thumrait (Oman) on 1 April, 127 mm at Salalah on 5 April and 101 mm at Doha on 10 April.

Maximum temperature in coastal regions generally varied from 30 to 35°C but were in the region of 40°C in the interior.

### Breeding conditions

The NOAA/AVHRR vegetation index imagery coverage for the Near East Region shows that, following good rains in March, excellent breeding conditions existed during April in many wadis of the coastal plains of the southern Tihama in Saudi Arabia, Yemen AR and Yemen PDR between 14° and 17°N. In early May vegetation activity in this area was seen to be decreasing. Good vegetation conditions were also observed in the wadis of the southern coastal plains of Yemen PDR and in the interior over a large area between 45°50'-46°50'E and 13°55'-14°20'N.

The reported widespread rains in the interior of Saudi Arabia during March did not seem to have resulted in widespread vegetation development according to the AVHRR imagery of 10 April.

In early May, the southern slopes of the Hadramaut area were observed to be green. The available imagery coverage for Oman showed that breeding conditions were generally unfavourable except for one area at 21°N/58°15'E which was very green during early May.

## Locusts

### PEOPLE'S DEMOCRATIC REPUBLIC OF YEMEN

Scattered low density solitarious adults were observed in wadi Em Riga (1301N/4435E), wadi Fajrah (1259N/4418E) and wadi Darr (1244N/4425E) during the second week of April.

### SAUDI ARABIA

On about 12 February adults were flushed every 30 metres or so mid-way between Jeddah and Taif. A few solitary adults still persist in the Qunfidah area.

### OMAN

One locust was seen at Lizqe (2335N/5814E) on 23 February.

### UNITED ARAB EMIRATES

The United Arab Emirates remained free of gregarious locust activity during April. A total of 20 adults were found in Shamal, Brirat, wadi Hagil and various farms.

There were no other reports of locusts from the Region.

## SOUTH-WEST ASIA

### Meteorology

With the exception of some weak ridges around the continental anti-cyclone (a residue of the winter high pressure), the situation was dominated by a depression which was frequently thundery, particularly over India, while Pakistan was in a transitional area with weak pressure gradients and some troughs moving from north to south. There was heavy rain in north-west Pakistan; Quetta recorded 49 mm on 12 April, and 132 mm for the first fortnight of April, while Hyderabad recorded 18 mm on 15 April. Previously, and in particular on 1 April, light rain (6 mm) was recorded at Gwadar near the Iran-Pakistan border. Jiwain recorded 15 mm during the first fortnight, Panjgur 13.2 mm, Khuzdar 9.8 mm.

Stormy weather was also recorded over India. Bombay for example recorded 81 mm on 15 April. Midday temperatures were generally in the range 25-35°C.

### Breeding conditions

No NOAA/AVHRR imagery coverage was available for the Makran and Baluchistan areas of Iran and Pakistan during this period. The summer breeding areas of India and Pakistan were observed to be extremely dry during early May.

Locusts

PAKISTAN

In the second half of March small numbers of adults were found at many localities in Uthal, Dera Murad Ismail, Turbat, Panjgur, Pasni and Kharan districts, the maximum density being 1200 per square kilometre at Rumra (2524N/6344E) on 23 March and at Tumpgi (2518N/6328E) on 27 March. Second instar hoppers were also found at Plantak (2718N/6409E) in Kharan on 19 March.

In the first half of April small numbers of adults were found at many localities in Uthal, Dera Murrad Ismail, Pasni, Panjgur, Khuzdar Kharan and Quetta districts, the maximum density being 750 per square kilometre at Leyurk (2710N/6500E) on 10 April. First to fifth instar hoppers over an area of 1 square kilometre at Rumra were sprayed with 22.5 litres of 10% dieldrin on 4 April as a precautionary measure.

In the second half of April the maximum density of adults was 1275 per square kilometre at Hurmagali (2837N/6449E).

INDIA

No locusts were reported in the second half of March. In the first half of April the maximum density of adults was 15 per square kilometre at Danta (2546N/7116E) on 2 April and at Shekar (2543N/7129E) on 11 April.

IRAN

Iran was reported clear in February and March.

There was no report from AFGHANISTAN.

FORECAST FOR JUNE - JULY 1983

The period is characteristically one of major movements and the commencement of summer breeding.

In West Africa only very small numbers of adults are likely to have over-wintered in Mauritania, Mali and Niger. If the ship's report of 15 March refers to Desert Locusts, significant numbers of adults are likely to reach the summer breeding area of Mauritania and perhaps north-east Mali. Breeding will commence to the north of 17°N in areas which receive rainfall or run-off.

In North-West Africa no spring breeding was recorded and only small numbers of adults are likely to persist.

In Eastern Africa there were good rains in March and April over the coastal plains of northern Somalia and Djibouti. Widespread low density adults have already been reported and these have probably started to breed already. If there are further rains over the plains groups of hoppers and considerable numbers of adults are likely to be produced and these may start to breed again, possibly producing some hopper bands. Widespread breeding is likely to commence in the interior of Sudan and perhaps in western Eritrea but it will be at low density.

In the Near East there could be widespread populations if generally low density breeding occurs in coastal and interior areas of the People's Democratic Republic of Yemen and in the interior of the Yemen Arab Republic.

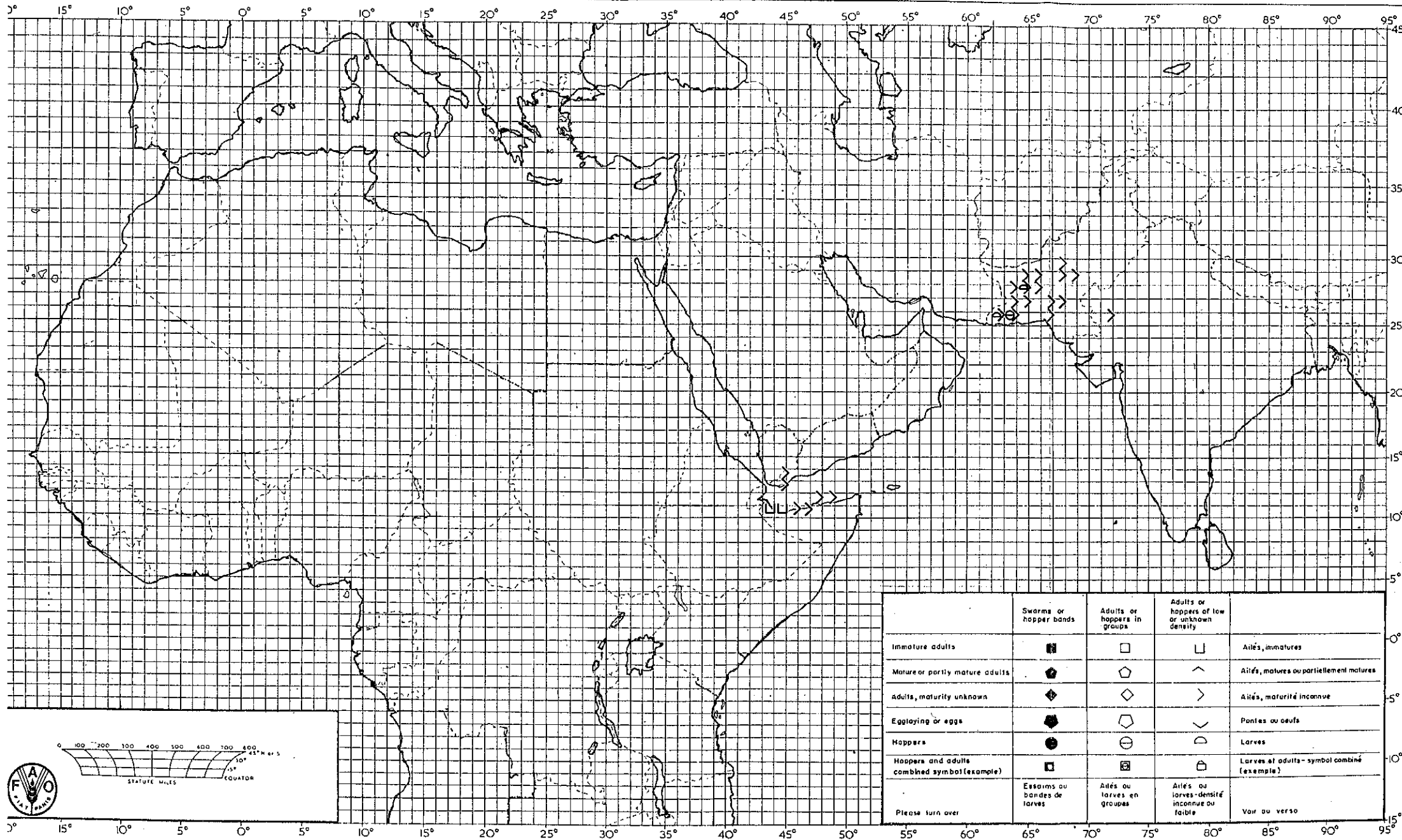
In South-West Asia spring breeding in Baluchistan is likely to terminate and the resulting adults will migrate at low density eastwards into the summer breeding area of Rajasthan in India and the adjacent deserts of Pakistan. Breeding will commence in the summer breeding area but will initially be at low density.

Rome

19 March 1983

May

# Desert Locust Situation Summary No. 56 APRIL-EARLY MAY / AVRIL - DEBUT DE MAI 1983



	Swarms or hopper bands	Adults or hoppers in groups	Adults of low or unknown density	
immature adults	■	□	▭	Ailés, immatures
Mature or partly mature adults	◆	◇	△	Ailés, matures ou partiellement matures
adults, maturity unknown	◆	◇	>	Ailés, maturité inconnue
Egg laying 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

