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AGP Division

# Locusts, other migratory pests and emergency operations group

## DESERT LOCUST SITUATION SUMMARY AND FORECAST

No. 73 SEPTEMBER - EARLY OCTOBER 1984

SUMMARY

Overall, the Desert Locust situation is very calm. Unusually small numbers of adults for the time of year were found in Pakistan and India and some were found in the People's Democratic Republic of Yemen. Small numbers of fledglings and mature adults were found in Mali in August.

# DESERT LOCUST SITUATION, SEPTEMBER - EARLY OCTOBER 1984

## WEST AFRICA

### Meteorology

The Intertropical Convergence Zone (ITCZ) withdrew progressively from 20°N and by mid-October its mean position was about 15°N. During the second decade of September interactions between the ITCZ and Atlantic depressions resulted in heavy rain at Rosso (58 mm), Tidjikja (43 mm) and Boutilimit (27 mm); these rains fell in other localities during the third decade, notably at Atar which received 46 mm. There was further rain in Senegal and in particular at St Louis, which received 51 mm during the second decade. There was also rain in Mali, Hombori received 57 mm during the third decade. There were similar interactions during the first decade of October, Rosso recording 48 mm on 4 October.

Maximum temperatures were in the range of 30-40°C in the interior and 25-30°C in coastal areas.

### Breeding conditions

During August there was substantial vegetation in southern Tagant, central and southern Assaba, around Aïoun el Atrouss and south of Nema. Vegetation was well developed in Timetrine but it was beginning to desiccate.

### Locusts

MALI

During August there were scattered young adults in the Bouressa basin. In the southern Adrar des Iforas fledglings were present at densities of 25-50 individuals per hectare over 40 hectares and in Tamesna there were 5-25 mature adults per hectare over an area of 35 hectares.

No locusts were reported from MAURITANIA or NIGER.

## NORTH-WEST AFRICA

### Meteorology

It will be recalled that the rains in Mauritania resulted from the interaction of the ITCZ and Atlantic depressions traversing the Maghreb. Paradoxically these perturbations were not very active for during the second decade of September the GTS reported 15 mm at Jendouba on 19 September. Later, Tunis recorded 11 mm on 21 September and Algiers 35 mm on 30 September. By contrast, during the first decade of October there was heavy rain in southern Tunisia; on 9 October 89 mm of rain fell at Gabes and 83 mm at Djerba Mellita. On 10 October Constantine recorded 45 mm, while Zuara recorded 39 mm. On 13 October Annaba and Bejaia reported 33 mm and 34 mm respectively. On 16 October Misurata recorded 55 mm. These rains were

the result of cyclogenesis and frontogenesis over the western Mediterranean. By comparison Morocco experienced generally dry weather, although heavy rain was reported in the region of Guelmin (2858N/1004W) which received 100 mm in one day and oued Dra was in flood for several days.

There was considerable variation in maximum temperatures; in September they were generally between 25°C in coastal areas and 45°C in the southern Sahara. Following rainy periods and in particular in October they rarely passed 20°C in coastal areas of Algeria and Tunisia.

Breeding conditions

No information is available but Meteosat imagery shows rain-bearing clouds over central Algeria on a number of days so that conditions will have become suitable for breeding at least locally in central Algeria.

Locusts

No information is available.

## EASTERN AFRICA

Meteorology

The combination of infrared Meteosat imagery, GTS synoptic data and Metars shows that the ITCZ over the Sudan continued to displace southwards and by the end of September it was in the region of 10°N, where some thunderstorms associated with cumulonimbus were observed. Superimposed on this movement were multiple thermoconvective cells which extended to the region of 15°N. Comparison of these cloud masses with those in the Central African Republic and Ethiopia suggests that they gave rise to rain of the order of 10 mm a day in the vicinity of the ITCZ. Ethiopia was also affected by thunderstorms which gave rise to the following rainfall totals: Debra Markos 24 and 28 mm on 2 and 11 September respectively; Combolcha 23 mm on 18 September; Bahar Dar 36 mm on 20 September; Gore 32 mm on 23 September; Neghelli 25 mm on 24 September and 33 mm on 10 October; Jimma 42 mm on 28 September. There was considerable development of cumulonimbus clouds over the Eritrean coast in mid-September and also over Djibouti, which recorded 11 mm of rain on 21 September, and along the northern coast of Somalia but no rainfall data have yet been received from DLCO-EA.

Maximum temperatures in Sudan frequently reached 40°C or more; in Djibouti they were frequently in the region of 35°C; in Somalia they generally ranged from about 25°C in coastal regions to 35°C in the interior; in Ethiopia there were generally great contrasts due to orography and air-land-sea effects and sometimes ranged from 15° to 35°C on the same day. In Kenya, Uganda and Tanzania they usually ranged between 25° and 35°C according to the location of the station and the presence or absence of thunderstorms.

Breeding conditions

No NOAA-AVHRR imagery is available for the period but conditions will almost certainly be favourable for breeding on the Red Sea coast of Ethiopia and along the northern coastal plains of Somalia.

Locusts

No locusts were reported during the last decade of August or in September.

## NEAR EAST

Meteorology

The strong heating of the Arabian peninsula maintained a large but weak low pressure area with surface pressures generally between 1000 and 1005 mb. As a result there were some sandstorms and some very localised thunderstorms. This thermoconvective activity showed up on Meteosat imagery for example at Saiq on 2 September, where the GTS reported 14 mm of rain, while 7 mm were recorded the next day; 10 mm on 5 September and 14 mm on 7 September. Sohar recorded 5 mm on 9 September. On 10 and 11 September there was widespread rain between Hail and Taif, which was confirmed by Meteosat. Thunderstorms were also detected along the southern Tihama on 21 September and in the vicinity of Hail on 30 September. In addition there were frequent light rains of oceanic origin in Dhofar in the Sultanate of Oman; precipitation generally did not exceed 2-3 mm but on 24 September the GTS recorded 6 mm. The FAO Locust Officer in Yemen PDR confirmed the very variable nature of the rains, not only in western coastal areas but also in Dathina. The FAO Regional Locust Officer in Jeddah confirmed the rain in Taif and in the Asir mountains and reported light rains in Abu Arish and south-east of Jizan in September and heavy rain around Jizan on 6 October.

The Red Sea Convergence Zone was generally centred at about 15°N during September but moved north towards 20°N in early October.

Maximum temperatures in the interior frequently reached 45°C, while in coastal areas they were generally between 28° and 38°C.

Breeding Conditions

Conditions are probably favourable for breeding in certain localities around Jizan on the southern Tihama of Saudi Arabia.

Locusts

PEOPLE'S DEMOCRATIC REPUBLIC OF YEMEN

Isolated adults were seen at Al-Farshah (1305N/4424E) on 25 September.

No other locusts were reported from the Region.

## SOUTH-WEST ASIA

### Meteorology

The monsoon continued to be very active with storms, sometimes thundery, in the summer breeding areas during the first half of September but withdrew from Rajasthan on 21-22 September and from Gujarat on 24 September. In India, the following rainfall totals were recorded in September: Barmer 13 mm; Bikaner 38.0 mm; Ganganagar 109.7 mm; Jaisalmer 43.7 mm; Jodhpur 97.6 mm; Sikar 139.6 mm; Bhuj 176.2 mm; Deesa 16.0 mm.

In Pakistan there were scattered moderate to heavy rains in the Cholistan and Khipro deserts during the first week of September and there was widespread heavy rain in the Tharparkar desert on 13-15 September. During the third week of September there were medium-heavy rains in the Cholistan and Nara deserts. According to the GTS 39 mm were reported at Jacobabad on 20 September.

After 1 October the thermoconvective instability over the summer breeding areas diminished under the influence of anticyclonic ridges extending from high pressure developing over Afghanistan and southern USSR.

In India maximum temperatures were frequently in the region of 40°C. In Pakistan they generally fluctuated between 25° and 35°C in coastal areas, but frequently exceeded 35°C in the interior.

### Breeding conditions

Breeding conditions were favourable in Pakistan during the first fortnight of September but the vegetation was beginning to dry up in many areas in the latter half of the month.

### Locusts

PAKISTAN

A total of 29 adults were seen at 10 localities during the first half of September, the maximum density being 4.5 per hectare at Driggah (2536N/6641E) on 9 September. In the second half of the month scattered adults were seen at 16 localities, the maximum density being 9 per hectare at Rinalhar (2813N/7158E) on 20 September. Pakistan was reported clear in the first half of October.

INDIA

Scattered adults were seen at eight localities in Bikaner district, five localities in Jaisalmer and one locality in Nagaur district in the second half of August; small numbers of hoppers were found in Bikaner and Jaisalmer districts.

In the first half of September isolated adults were found at four localities in Bikaner and Jaisalmer districts at a maximum density of 225 per hectare at Loharki (2709N/7147E) on 15 September. In the second half of September scattered adults were found at eight localities in Jaisalmer and Bikaner districts, at a maximum density of 225 per hectare at Lunar (2636N/7014E) on 17 September.

No locusts were reported from AFGHANISTAN during August.

## FORECAST FOR NOVEMBER-DECEMBER 1984

The Desert Locust situation remains exceptionally calm. There have been few reports of breeding in the summer breeding areas and only small numbers of adults will reach winter breeding areas.

In South-West Asia small numbers of adults will reach winter breeding areas in Baluchistan in Pakistan and small numbers of adults will remain in the summer breeding areas.

In the Near East there is likely to be small scale breeding in coastal areas of Yemen PDR. Small numbers of adults are likely to reach the Tihamas of Yemen AR and Saudi Arabia and to start to breed. It is unlikely that any adults will reach eastern Arabia from the east.

In Eastern Africa small numbers of adults will concentrate in Red Sea coastal areas of Sudan and Ethiopia in areas which have received summer floods and or early winter rains and will start to breed. Small numbers of adults may reach the northern coastal plains of Somalia and start to breed.

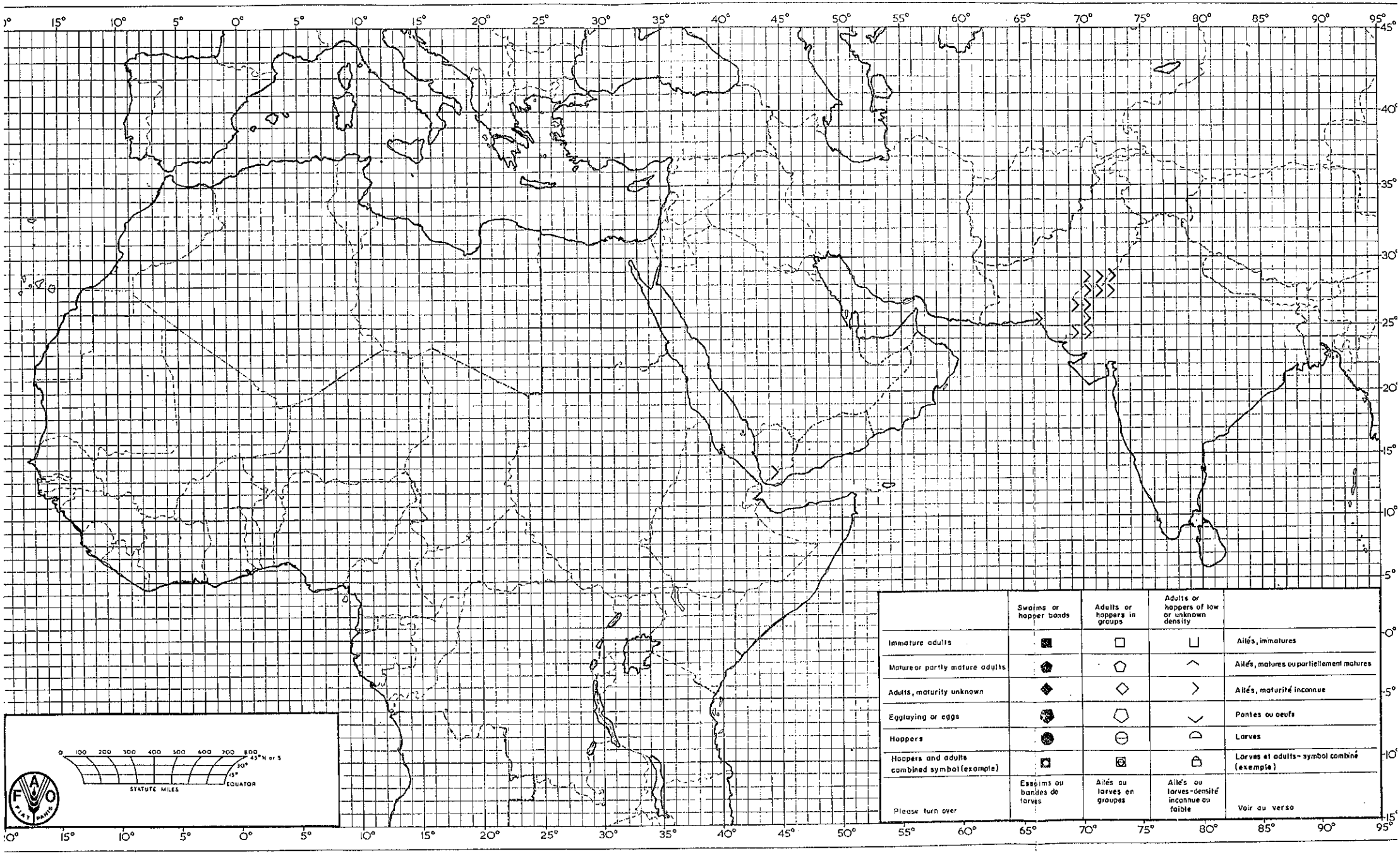
In West Africa small numbers of adults will persist in areas where green vegetation persists.

In North-West Africa small numbers of adults may reach central and western Algeria and possibly southern Morocco, and some adults may persist in Libyan oases.

Rome
24 October 1984

1984

# Desert Locust Situation Summary No. 73 SEPTEMBER-EARLY OCTOBER / SEPTEMBRE-DEBUT D'OCTOBRE




| | 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 matures |
| 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 |