



联合国
粮食及
农业组织

FOOD AND
AGRICULTURE
ORGANIZATION
OF THE
UNITED NATIONS

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

ORGANIZACION
DE LAS NACIONES
UNIDAS PARA
LA AGRICULTURA
Y LA ALIMENTACION

منظمة
الأغذية
والزراعة
للأمم
المتحدة

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. 62 OCTOBER - EARLY NOVEMBER

SUMMARY

Large scale control operations were in progress against swarms and hopper bands in India and Pakistan. By the end of October most areas had been cleared of gregarious infestations but the possibility of some escapes cannot be ruled out. Groups of adults were reported from the People's Democratic Republic of Yemen, Yemen Arab Republic and the Kingdom of Saudi Arabia and hoppers were reported from two localities in South-West Arabia.

DESERT LOCUST SITUATION, OCTOBER - EARLY NOVEMBER 1983

WEST AFRICA

Meteorology

The ITCZ continued to move southwards and exhibited several waves in the southern part of the Sahel between 15°N and 10°N. Sandstorms were observed on 2 and 8 October in Mauritania, while thunderstorms were reported from Senegal and Gambia on 6 October but according to GTS data daily rainfall totals did not exceed 12 mm. Bamako recorded 23 mm on 5 October. No rain was reported north of 17°N. This analysis was confirmed by cloud photographs obtained via Meteosat.

Midday temperatures ranged from about 30°C in coastal areas of Mauritania, Senegal and Gambia to 40°C in interior areas in early October and to the mid-30's in mid-November.

Breeding Conditions

NOAA/AVHRR vegetation index imagery of 21-22 October showed that breeding conditions north of 17°N were favourable in only very limited areas, at 1715N/1315W in Mauritania, 1910N 0325-0355E in Mali and in southern Tamesna in Niger.

Locusts

No locusts were reported.

NORTH-WEST AFRICA

Meteorology

A thundery trough, very visible on Meteosat imagery, influenced the eastern Maghreb, particularly Tunisia and Libya from 1-4 October. Tunis received 57 and 64 mm respectively on 2 and 3 October, while Misurata recorded 62 mm on 3 October. Several wadis were in flood. Sandstorms accompanied this thundery trough.

At the beginning of the second decade of October Atlantic depressions affected Morocco and part of Algeria, while Tunisia and Libya were protected by an area of high pressure which weakened from 18 October. Rain fell in many areas but was nowhere heavy. Starting on 18 October a cyclogenesis (rapid deepening of a depression) in the western Mediterranean led to heavy rain and the perturbations associated with it resulted in 21 mm of rain at Bechar on 20 October, the same as Tunis, while in Libya Zuara and Tripoli recorded 17 mm and 28 mm respectively. On 21 October Tripoli registered 25mm while Sirte and Benina recorded 6 and 5 mm. On 26-28 October coastal areas of Libya recorded between 24 and 63 mm of rain.

Large changes in temperatures accompanied the above-mentioned perturbations but in general maximum temperatures ranged from 25°C in coastal areas to 35°C in interior areas.

Breeding Conditions

NOAA/AVHRR imagery for southern Algeria indicated that conditions for breeding were unfavourable in mid-October.

Locusts

LIBYA

The Libyan report for September and October states that at Kufra young Desert Locust hoppers were controlled with 90 bags of BHC bait and 13 litres of Malathion 50%. A ground survey team found solitarious Desert Locust adults at Sarir.

MOROCCO was reported clear in September.

There were no reports from ALGERIA or TUNISIA

EASTERN AFRICA

Meteorology

Moderate to heavy showers continued in the Ethiopian highlands until the end of October. The ITCZ moved southwards across the Horn of Africa reaching 4°N on 21 October.

From Meteosat imagery it appeared that there were two periods, 1-6 October and 15-17 October, when rain fell in coastal regions of Sudan, Ethiopia, Djibouti and northern Somalia. Early November was dry in coastal areas.

Daily maximum temperatures ranged from 15° - 25°C in highland areas of Ethiopia and up to 35°C in coastal areas of Ethiopia and Djibouti. They were generally 30-35°C in Somalia and 15-35°C in Kenya, depending on altitude.

Breeding Conditions

NOAA/AVHRR vegetation index imagery for 8 and 17 October shows that the coastal areas of Ethiopia, Djibouti and western Somalia were generally very dry. Some vegetation development was, however, noticed at 1320N/4215E, between Assab and Edd.

Locusts

SUDAN

In central Sudan five mature adults were flushed by a vehicle in one km west of Jebel El Sheiweh (1354N/3149E).

According to a later report for August a ground survey team found groups of immature adults over an area of 215 ha at densities of 1880-3000/ha and third-fourth instar hoppers at densities of 2-3/bush over an area of 100 ha at two localities in the Musmar area of the Red Sea Province. Control operations using poisoned bait were undertaken against the hoppers and adults. By late August adult densities had declined to 480-720/ha.

There were no other reports from the Region.

NEAR EAST

Meteorology

The development of the continental anti-cyclone close to the Caspian Sea affected the Arabian peninsula by progressively replacing waves by weak pre-existing depressions. The predominance of dry north-easterly air was reflected in the daily maximum temperatures which were generally in the range 25-35°C in coastal areas of western and southern Arabia and between 30-35°C elsewhere.

Breeding Conditions

NOAA/AVHRR vegetation index imagery of 8 and 17 October shows that coastal areas in south-west Arabia were generally unfavourable for breeding.

Locusts

PEOPLE'S DEMOCRATIC REPUBLIC OF YEMEN

Isolated fifth instar hoppers and fledglings were seen in wadi Duhur (1535N/4738E) on 9 October. A group of adults was reported flying southwards on 29 October in wadi Masilah at 1512N/5108E.

YEMEN ARAB REPUBLIC

A swarm was seen at Mabar (1549N/4418E) on 25 and 26 October but had departed by 29 October when the area was visited by a survey team.

KINGDOM OF SAUDI ARABIA

On 28 September fifth instar hoppers and fledglings at densities of 4-5/sq m were found over an area 30km x 40km, 107 km south-east of Fao at 1920N/4550E in the Rub al Khali. Control measures were undertaken. Solitarious adults were found in several localities around Namas (1905N/4208E) and at Bal Joreishi 1947N/4133E and Dhaharan (1740N/4330E) in August-September 1983.

There were no other reports from the Region.

SOUTH WEST ASIA

Meteorology

In early October a depression centred near the Himalayas extended to central Pakistan. As a result there were moderate south-westerly winds to the south of the depression. From 5 October an anti-cyclone developed near the Caspian Sea with a ridge of 1015 mb in the direction of Afghanistan. On 6 and 7 October the anti-cyclone developed into an area of high pressure of 1025 mb which caused the above-mentioned depression to recede towards the east. This resulted in a complete reversal of the wind-field, south-westerly winds being replaced by north easterlies. These winds were strong enough to give rise to sandstorms on 8 October. In India the north-easterly winds were affected by areas of instability and some thunderstorms were reported close to the border with Pakistan. In the second half of October ridges progressively replaced the depression and by 24 October the low pressure was restricted to southern and eastern India.

Rainfall data supplied via the GTS are incomplete but the following is a resume: There were significant rains on the axis Bombay-Delhi during the first decade of October, particularly on 8-10 October, amounts being 29 and 53 mm at Ahmadabad on 8 and 9 October and 59 mm at Jaipur on 10 October. Jodhpur received 12 mm on 10 October. During the second and third decades rainfall decreased but there were localised showers in Jaisalmer and Bikaner districts.

Breeding Conditions

NOAA/AVHRR vegetation index imagery showed that Rajasthan and the adjacent desert areas of Pakistan were drying out rapidly.

Locusts

PAKISTAN

Twenty-seven immature swarms were reported from the Cholistan, Nara and Tharparkar deserts. All these swarms and 13164 hopper bands were controlled by aerial and ground teams. In addition 1805 sq km were strip sprayed. By the end of the month the Cholistan and Tharparkar deserts were clear of hoppers and adults. In the Nara desert control was continuing against late instar hoppers and fledglings in a few localities near the eastern border. During the second half of October 40 932 litres of 10% Dieldrin, 6469 litres of 98% Fenitrothion and 13008 kg. of 12% BHC dust were used.

INDIA

Ten swarms were reported between 14 and 27 October in border areas of Jaisalmer and Barmer districts of Rajasthan and Kutch (Bhuj) district of Gujarat. Aerial and ground control measures were mounted against these swarms and against hoppers in 31 localities in Jaisalmer and Barmer districts and against high density adult populations in seven localities of Kutch(Bhuj)district of Gujarat. By 20 October mopping up operations were confined to the Kishengarh, Tanot and Sadhewala areas of Jaisalmer district. A total of 8150 kg of BHC 10% dust and 55 litres of liquid insecticide were used.

AFGHANISTAN was reported clear in September.

There was no report for IRAN.

FORECAST FOR DECEMBER 1983 - JANUARY 1984

The forecast period is characterised by restricted movements of adults and breeding around the Red Sea and Gulf of Aden. Adults in considerable numbers are likely to have reached Baluchistan, south-east Iran and perhaps eastern Arabia prior to the forecast period and some may reach south-west Arabia during it. Breeding around the Red Sea and Gulf of Aden is likely to be on a small scale initially and mainly concentrated in areas which have received late summer floods or early winter rainfall.

In South-West Asia intensive aerial and ground control operations against swarms and hopper bands had almost eliminated gregarious populations by the end of October but the size of the less gregarious component is not known. Many of these are likely to have moved to Baluchistan and south-eastern Iran already but considerable numbers may remain in the summer breeding areas, where they will overwinter.

Breeding will not start in the winter-spring breeding areas until after the forecast period.

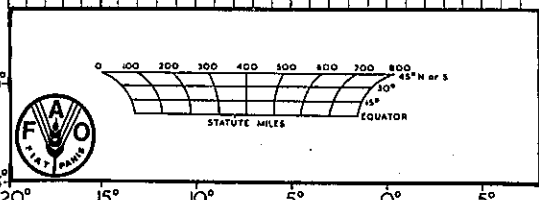
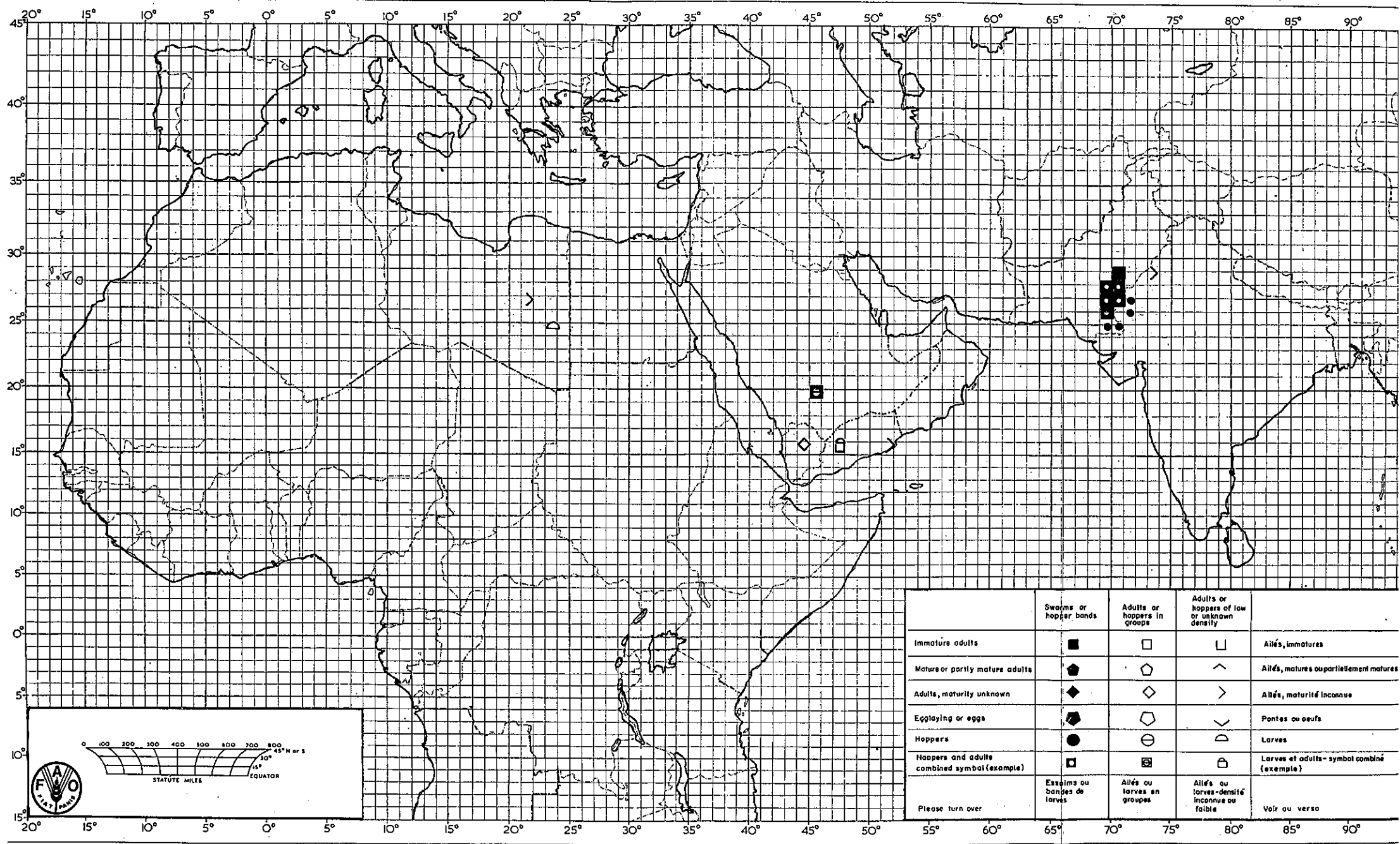
In the Near East considerable numbers of adults may have reached Oman and the United Arab Emirates from the east. The presence of groups in Yemen PDR, Yemen AR and south-central Saudi Arabia suggests there was undetected gregarious breeding in the interior of south-west Arabia during the late summer. The resulting adults are most likely to reach coastal areas of all three countries and start to breed in areas which received late summer floods or early winter rainfall. These may be augmented by adults from India and Pakistan.

In Eastern Africa breeding will occur in the Tokar delta, other coastal areas of the Sudan and northern Ethiopia which received late summer floods or early winter rainfall. Some adults may reach the northern coastal plains of Somalia, where small scale breeding may start.

In North-West Africa small numbers of adults may have reached southern, central, western and eastern areas of Algeria from the south.

In West Africa small numbers of adults may be present in the southern Sahara.

Rome, 17 November 1983



	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
Egg laying or eggs	◼	◑	∨	Pontes ou oeufs
Hoppers	●	○	∩	Larves
Hoppers and adults combined symbol (example)	◻	◻	◻	Larves et adultes - 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