

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



ORGANIZACION DE LAS NACIONES UNIDAS  
PARA LA AGRICULTURA Y LA ALIMENTACION

FOOD AND AGRICULTURE ORGANIZATION  
OF THE UNITED NATIONS

Via delle Terme di Caracalla, 00100 - ROME

Cables: FOODAGRI ROME

Telex: 610181 FAO I

Telephone: 5797

AGP Division

## Locusts, other migratory pests and emergency operations group

# DESERT LOCUST SITUATION SUMMARY AND FORECAST

No. 13      September 1979

### SUMMARY

Reported numbers of Desert Locusts remain low in all Regions. Monsoon rainfall was generally deficient throughout the Recession Area and no swarm formation is anticipated.

There have been widespread rains in areas around the Red Sea and Gulf of Aden and breeding on a small scale is likely to occur in many areas. Some groups could form if winter rainfall is heavy and widespread. Westward emigration from summer breeding areas in India and Pakistan is likely to be on a small scale. Similarly only small numbers of adults are likely to reach North-West Africa from the summer breeding areas south of the Sahara.

## DESERT LOCUST SITUATION - SEPTEMBER 1979

Since May 1979 the weather summaries have been based on synoptic charts prepared by the Consultant Synoptic Meteorologist seconded by the World Meteorological Organization, Geneva. Extra information has been provided by the interpretation of Meteosat imagery supplied by the European Space Operation Centre, Darmstadt and of GOES-Indian Ocean imagery supplied by the Centre pour la Météorologie Spatiale, Lannion and by information supplied by the various national and regional locust organizations and commissions.

### WEST AFRICA

#### Weather

As is normal during September the Intertropical Front (FIT) withdrew southwards, the humidity decreased and the sky cleared as a result of decreased monsoon water vapour. These are the first signs of the next dry season. At the end of September the position of the FIT at the surface was along the southern border of Niger so that rains in the recession area were very much below average. For example Nguigni did not receive even one millimetre (compared with a long term mean of 22 mm). Maradi received only 37 mm (normal 110 mm). Senegal was equally dry, except at Podor where 107 mm were recorded (normal 84 mm). Similarly, at Casamance, the rice-granary of Senegal, rainfall was less than 50% of normal. Although no reports from Mauritania are yet available it is considered that the rainfall was equally deficient. In southern Mali and Upper Volta the rains were closer to normal. As there were few heavy monsoon rains even south of 15°N in August and none in September all rain fell from local thunderstorms or were associated with westward moving squall lines.

No locusts were reported in September or early October. In August in MAURITANIA, one male was captured at Aicun el Atrous on 31 August; a few scattered females were captured in MALI; small numbers of green second instar hoppers were seen at Eralral (1830N/0735E) in a mixture of Boerharia, Tribulus and Eragrostis at a density of 2-4 per plant in NIGER.

### NORTH-WEST AFRICA

#### Weather

In the course of the first decade an anticyclonic regime prevailed over the Atlas and to the north, while the heat low over the Sahara persisted. Rainfall was rare. In the second decade the high pressure tended to weaken, permitting the passage of more or less active cold fronts. On one occasion 25 mm of rain fell at Tindouf. Rain also fell along the northern coast.

During the third decade a low pressure regime was established over the western Mediterranean. Undulations along the cold front swept over the Maghreb and the cold front penetrated deeply into the Sahara. Rain was widespread in Algeria and Tunisia, 41 mm were recorded at In Salah and 42 mm at In Amenas on 23 September respectively. Morocco was not affected by the rain.

No locusts were reported, despite an intensive survey of the Hamada de Tinrherf from 18 to 25 September, from LIBYA during September. No locusts were reported from ALGERIA, MOROCCO or TUNISIA.

In July some solitarious adults were found in several localities in the Province of Errachidia in MOROCCO (3157N/0426E) but in August the situation was reported to be calm.

### EASTERN AFRICA

#### Weather

During the first two decades the Intertropical Convergence Zone (ITCZ) fluctuated between 17° and 19°, as is usual for the time of the year but from 18-19 September it started to withdraw, at first erratically then more stably. By the end of the month it had reached 10-12°N. The distribution of rainfall was very erratic. Atbara recorded 64 mm in the first decade (normal 4mm) but in the second it received only 2mm. The highest rainfall recorded was at Abu Naama in the second decade, 136 mm as against the normal 37 mm, but it received only 1 mm in the first decade. Ground survey teams reported good rains and flooding in summer breeding areas around Sinkat (1851N/3651E), Derudeb (1733N/3606E) and Wadi Oko (2028N/3547E). Moderate rains also fell along the Red Sea coast, between Mohammed Gol (2055N/3076E) and Khor Sitrab (1838N/3732E).

In Ethiopia rainfall was similarly generally deficient and irregularly distributed. The highest figure reported was 266 mm at Debra Markos (214 mm normal); on the other hand Combulcia recorded only 108 mm compared with the average figure of 214 mm. Asmara received 38 mm as against a normal figure of 3mm. There were no station totals available from Somalia but it is probable that there were light rains in the north-west of the country.

#### SUDAN

In September one mature adult was reported from the Red Sea coast between Mohammed Gol and Khor Sitrab. In August adults at densities of 3,000 per hectare were reported over an area of 250 hectares at Hamashkoreib. Other parts of the country were reported to be free of Desert Locusts.

No reports of locusts have been received from any other country in Eastern Africa since July.

### -NEAR EAST

#### Weather

Almost all the Arabian Peninsula lay north of the Intertropical Convergence Zone, which oscillated along a line from Dubai to Perim. However, on the 13 and 14 September it reached Qizan and gave rise to moderate-heavy rain in the mountains and on the plains of the Yemen Arab Republic and the People's Democratic Republic of Yemen. These resulted in flooding in Wadis Hadhramaut, Habban, Bana and Turban. The only station record for the area was of 12 mm at Taiz on 14 September. The Dathina, Qatabah and Dureimiyah areas of PDR Yemen

also received some light rain between 25 and 28 September. The Tihama of the Yemen Arab Republic received frequent rain according to satellite imagery. On 17 - 18 September in particular a band of cloud capable of giving rain was visible, associated with the Red Sea convergence zone.

In Saudi Arabia there was widespread rainfall on the Asir and Hijaz mountains over which a band of cumulo-nimbus clouds were frequently visible on satellite imagery. At the beginning of the month a depression from the Mediterranean produced rain over northern and north-western Arabia. Moderate to heavy rain was also reported from the Gizan area of the southern Tihama and from the Yenbo and Um Lejj areas of the northern Tihama. Light rain was also reported from the Qunfidah area. The rest of Arabia was reported to be dry.

#### SAUDI ARABIA

In the course of surveys of the southern Tihama one adult was seen east of Qunfidah.

#### YEMEN ARAB REPUBLIC

A few solitary adults were reported in the wadi Hayran and Zaidiyah areas of the Tihama.

#### PEOPLE'S DEMOCRATIC REPUBLIC OF YEMEN

During the second week of September two adults were found at Lihyah (1425N/4715E) in wadi Habban. No adults were found during the second half of the month but ecological conditions were favourable for breeding.

A few solitarious adults were reported from the Shalatein area (2300N/3540E) of south-eastern EGYPT during August, and conditions were said to be semi-favourable for breeding.

KUWAIT was reported clear during SEPTEMBER

No reports for September have been received from BAHREIN, EGYPT, IRAN, QATAR, SULTANATE OF OMAN or UNITED ARAB EMIRATES.

#### SOUTH-WEST ASIA

#### Weather

The drought which commenced in the second half of August continued during early September. But during the week 12-19 September there was a return of rainfall to parts of Rajasthan, Punjab, Kashmir and Gujarat. However, after this temporary return of rain, there was virtually no further rain in northern India so that as a whole the summer rains were generally poor in northern India and extremely poor in Pakistan. Meanwhile, although dry air has become well-established over northern India it is still possible that there will be further rains but these will be localised and of moderate intensity. Although there are no station reports from Afghanistan or Iran it is probable they remained dry.

## PAKISTAN

Low density adults were seen at five localities in the Cholistan desert at maximum densities ranging from 375 to 750 per square kilometre during the second half of the month. Only scattered adults were seen in the first half of October.

## INDIA

Low density adults, mostly immature, were reported at densities of 25 - 1050 per square kilometre from Sam (2650N/7030E) and Mohangarh (2717N/7116E) areas of Jaisalmer from 1 - 9 September and at a density of 150 per square kilometre from the Bhaluri (2803N/7228E) area of Bikaner on 8 September. 153 first to fifth instar hoppers were collected in the Sam and Mohangarh areas and one second and one third instar solitaricolor hoppers were collected from the Chohtan (2559N/7104E) area of Barmer on 3 September. The report for the second half of September has not yet been received.

No locusts were reported from AFGHANISTAN

Some scattered solitary adults were reported from IRAN during August.

## FORECAST FOR NOVEMBER - DECEMBER 1979

The forecast period often marks the beginning of winter breeding in coastal areas around the Red Sea and Gulf of Aden. Already there has been widespread rainfall in some of these areas and if further rainfall is widespread and heavy successful breeding could occur in many areas. Reported population levels are low in all Regions but groups could form within the forecast period in areas receiving winter rainfall.

In South-West Asia westward migration into Las Bela district and the Mekran and Baluchistan of Pakistan, south-eastern Iran and possibly Oman, which has probably started, will continue but the numbers involved will be small. Some adults will remain in Rajasthan and adjacent areas of Pakistan.

In the Near East the absence of information from Oman suggests that locusts did not breed there following the storm of mid-June. Small numbers of adults could reach Oman and the United Arab Emirates but numbers will be small. Only small numbers of adults have been recorded from the People's Democratic Republic of Yemen, the Yemen Arab Republic and South-West Saudi Arabia but numbers are likely to increase with the establishment of the Red Sea Convergence Zone. Breeding is likely to occur in many coastal areas. At first it will be on a small scale but could give rise to some groups if winter rains are heavy and widespread. There could also be limited breeding in some interior wadis in Yemen PIR.

In Eastern Africa numbers of adults are likely to increase in Red Sea coastal areas of Sudan and Ethiopia and in some green areas west of the coastal range in Sudan. Breeding is likely to be on a small scale at first, but groups could form if winter rainfall is heavy and widespread. Breeding is also likely to commence in coastal and sub-coastal plains of northern Somalia. There are no known sources of locusts which could move south-west across the Somali peninsula.

In West Africa any breeding which has occurred in the Adrar des Iforas and adjacent areas of north-east Mali, in Tamesna and Air of north-west Niger will come to an end. In view of the generally deficient rainfall in these areas and in Mauritania the number of adults which will be produced is likely to be small. Some of these adults are likely to move northwards into Algeria and Libya in North-West Africa but numbers will be low. There is no threat of significant numbers reaching West or North-West Africa from the east.

Rome

23 October 1979

