

FOOD AND AGRICULTURE **ORGANIZATION** OF THE UNITED NATIONS

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DESERT LOCUST SITUATION **SUMMARY AND FORECAST**

No. 72 AUGUST - HARLY SEPTEMBER 1984

SUMMARY

Overall, the Desert Locust situation is calm. Small numbers of adults were recorded in India, Pakistan and the People's Democratic Republic of Yemen and small numbers of hoppers were found in India.

DESERT LOCUST SITUATION, AUGUST - EARLY SEPTEMBER 1984

WEST AFRICA

Meteorology

As reported in Summary No. 71, the Intertropical Convergence Zone (ITCZ) remained quasi-stationary at about 20°N over Mali but with a tendency to reach only 15°N over Chad. There were sandstorms north of the ITCZ particularly over Mauritania while there were thunderstorms to the south. On 1 August Nema reported 20 mm of rain, on 14 August Kiffa received 30 mm and Birni N°Kouni 25 mm. On 16 August Gao received 21 mm, on 17 August Aïoun el Atrouss received 35 mm and Nema 19 mm. On 19-21 August a major thermoconvective cell separated from the ITCZ and moved from Senegal to eastern Mauritania. The associated cumulonimbus clouds were very clear on Meteosat imagery but no rainfall totals are available through the GTS as the meteorological network is very restricted in eastern Mauritania. This particular situation was similar to one on 19 September 1974 described by Skaf in the Technical Series Report number AGP/DL/TS/17.

During the third decade of August several thermoconvective developments were detected by Meteosat, in particular on 25 August, between Nouakchott and Nouadhibou. On 26 August these cumulonimbus were moving eastwards and gave 25 mm of rain at Kaedi, 14 mm at Aïoun el Atrouss and 5 mm at Kiffa. Meteosat also showed further thunderstorms over Chad on 30 August and 6 September.

Maximum temperatures were between 32° and 42°C in the interior, and 25° to 32°C in Atlantic coastal areas.

Breeding conditions

No data are available but conditions will have become favourable for breeding in eastern Mauritania but are probably generally unfavourable in Mali and Niger.

Locusts

The situation was reported to be calm in August. In July mature adults were present at a density of 5 per hectare over an area of 25 hectares in wadi In Ounfassen (1809N/0252E) in MALI.

NORTH-WEST AFRICA

Meteorology

Some Atlantic disturbances in the process of breaking up crossed the Maghreb. According to the GTS only light rain was recorded, exceeding 4 mm in 24 hours. Meteosat imagery showed some scattered thunderstorms in areas not covered by ground stations. On the other hand a thunderstorm at Tamanrasset on 1 August was confirmed by the GTS.

Maximum temperatures in the interior were in the range 36°-46°C but in coastal areas they were between 26° and 36°C.

Breeding conditions

No information is available but the only area where breeding is possible is in the Libyan cases.

Locusts

No information is available.

EASTERN AFRICA

Meteorology

In spite of the fragmentary synoptic data from the Sudan it is possible to position the ITCZ, and in particular the transition zone between dry and humid air, at about 15°N. In this zone, but in particular to the south, there were some violent thunderstorms according to both GTS data and Meteosat infra-red imagery. The only significant rain reported by the GTS was 9 mm at Damazine on 3 August, but it is clear from Meteosat imagery that larger amounts fell throughout the month, and particularly in mid-August when cloud masses reached 15°N at 30°E. On 23 and 27 August further thunderstorms were detected by satellite rather to the south. Daily maximum temperatures frequently exceeded 40°C.

In the Ethiopian highlands, synoptic data, confirmed by Meteosat, showed numerous and violent thunderstorms particularly in western Ethiopia, throughout the month. According to DLCO-EA the coast was dry during the first decade of August.

Djibouti and the northern coastal plains of Somalia were dry during the first decade of August. Meteosat imagery showed intense cyclonic activity over the Indian Ocean close to the coast at the latitude of Mogadishu, which brought in moist air and affected Somalia from 17 to 20 August and again from 23 to 25 August. There was some instability over Kenya and Uganda but Tanzania was generally dry.

Breeding conditions

The main summer breeding areas in the Sudan were reported to be dry. The coasts of Ethiopia and Somalia were dry during the first decade of August.

Locusts

No locusts were reported during the first two decades of August.

NEAR EAST

Meteorology

Multiple low pressure cells of thermal origin resulted in dust storms and local sandstorms. Associated thermoconvective activity gave rise to showers and thunderstorms at Abha from 2 to 7 August but according to the GTS there were only a few millimetres of rain. On 5 August the thunderstorms extended towards El Baha and resulted in more than 10 mm of rain. The evolution of this typical activity could be followed on Meteosat imagery during the first decade of August. The Red Sea Convergence Zone generaly lay between 12° and 16°N and gave rise to moderate to heavy rain at Jizan. The second decade of August was dry but from 20 August several thunderstorms developed around Abha, giving 19 mm of rain in 48 hours.

In Oman, coastal areas and in particular the area around Salalah was frequently affected by maritime disturbances but daily rainfall totals rarely exceeded 3 mm. On the other hand Saiq recorded 21 mm on 2-3 September.

Maximum daily temperatures ranged between 34 and 44°C in interior areas and 28°-33°C in coastal areas.

Breeding conditions

Ecological conditions were reported to be unfavourable for breeding in Saudi Arabia and the People's Democratic Republic of Yemen.

Locusts

PEOPLE'S DEMOCRATIC REPUBLIC OF YEMEN

Two adults were seen at Surrahtal-Shaikh (1358N/4615E) on 11 August. No other locusts were reported from the Region.

SOUTH-WEST ASIA

Meteorology

As reported in Summary No. 71 there were heavy and repeated rains in Tharparkar and Lasbela and scattered light to moderate rains in Nara and Cholistan deserts in the first half of August. There was further heavy and widespread rain in Cholistan in the third week of August, while there were scattered light rains in Karachi, Tharparkar and Rahimyarkhan on 22 August. The effect of the monsoon in the summer breeding area was very variable from one day to another according to the mobility of thundery cells. In the first half of August Barmer recorded 163.7 mm, Jodhpur 83.7 mm, Jaisalmer 46.9 mm, Bikaner 10.5 mm, Sikar 6.1 mm and Ganganagar 2.8 mm whilst in Gujarat, Deesa recorded 404.4 mm.

Maximum daily temperatures ranged from 33° to 42°C.

In the second half of August the rains improved at Bikaner, which received 34 mm on 16 August, 27 mm on 20 August and 17 mm on 21 August and a further 11 and 6 mm on 2 and 3 September respectively. Jaisalmer and Jodhpur also experienced frequent showers but daily rainfall totals did not exceed 16 mm.

The need for imagery from the Indian geostationary satellite INSAT in order to study developments of the monsoon in the summer breeding area is stressed.

Breeding conditions

Although no NOAA/AVHRR imagery is available it is certain that conditions were favourable for breeding in many parts of the summer breeding area.

Locusts

PAKISTAN

During the first fortnight of August isolated adults were seen at 23 localities in Uthal, Mirpur Khas; Sukkur, Bahawalpur and Rahim Yar Khan districts, the maximum being 6 per hectare at Naka Khari (2515N/6645E) on 12 August.

In the second fortnight the maximum density of adults was 3.5 per hectare at Jerai (2532N/6642E) in Lasbela district.

INDIA

Adults were found at only one locality, Rathoran (2707N/7144E) in Jaisalmer district, during the first half of August, at a density of 30 individuals per square kilometre. Small numbers of solitaricolor first to third instar hoppers were found in the same area.

No locusts were reported from AFGHANISTAN during July.

FORECAST FOR OCTOBER - NOVEMBER 1984

The forecast period normally marks the end of the summer breeding season and the migration of adults to the winter breeding areas. This year breeding will have been on a very reduced scale even though monsoon rains have been adequate in Mauritania, Pakistan and India, and only small numbers of adults will reach winter breeding areas.

In <u>South-West Asia</u> breeding, which will have been widespread but at low density in <u>Rajasthan</u> in India and in the <u>Tharparkar</u>, Khipro, <u>Nara and Cholistan deserts and in Lasbela district</u>, will end. <u>Small numbers of adults will reach Baluchistan but others will remain in the summer breeding areas.</u>

In the <u>Near East</u> there may be restricted breeding in coastal and interior areas of Yemen PDR and in the interior of Yemen AR and Saudi Arabia. Small numbers of adults are likely to reach the Tihamas of Yemen AR and Saudi Arabia and to start to breed.

In <u>Eastern Africa</u> small numbers of adults will concentrate along the Red Sea coasts of Sudan and Ethiopia in areas which have received summer floods and will start to breed.

In <u>West Africa</u> breeding, which will have been widespread but at low density in Mauritania, Mali and Niger, will end. Small numbers of adults will occur in areas where green vegetation persists.

In <u>North-West Africa</u> the situation will remain calm although a small number of adults may reach central and western Algeria and southern Morocco from the south and some adults may persist in Libyan oases.

Rome 17 September 1984

