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ORGANIZACION DE LAS NACIONES UNIDAS PARA LA AGRICULTURA ET L'AGRICULTURE Y LA ALIMENTACION

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. 74 OCTOBER - EARLY NOVEMBER 1984

SUMMARY

The Desert Locust situation remains exceptionally calm. There has been localised breeding in north-eastern Mali and small numbers of adults have been found in India.

DESERT LOCUST SITUATION, OCTOBER - EARLY NOVEMBER 1984

WEST AFRICA

Meteorology

The Intertropical Convergence Zone continued its progression towards the Gulf of Guinea, but developed some waves around 15°N over Senegal and around 10°N over Chad. As recorded in Summary No. 73 Rosso received 48 mm on 4 October (Tadjedjoumet has received 50.5 mm and Tessalit 9.7 mm on 30 September). During the second and third decades of October there were several heavy showers giving 25-45 mm of rain in 24 hours to the south of 15°N. Daily maximum temperatures were in the range 30°-40°C in the interior and 25°-30°C in the coastal areas.

Breeding conditions

Although there had been rather widespread rains in the Adrar des Iforas, northern Malian Tamesna and southern Timetrine on 17 June, 1 and 17 July, 2 August and 2 September annual vegetation was becoming dry in early October except in some wadis in south-west Malian Tamesna, where there was green Tribulus ochroleucus, Fagonia, Chrozophora, Morettia, Boerhavia, Schouwia and Pulicaria on silty-clay soils. The rain of 30 September caused many wadis to flow in north and north-west Adrar des Iforas and extended to southern Tanezrouf and to southern Algeria.

Locusts

MAURITANIA

During September small numbers of mature adults and some green first to third instar hoppers were found around Aïoun el Atrouss.

MALI

In September, immature and mature adults at densities of 10-50 per hectare and hoppers of all instars at densities of 100-5000 per hectare were found over 100 hectares at the confluence of oueds Tin Essako and In Djaram (1815M/0240E) and in oueds Tin Eze (1816M/0242E) over 30 hectares, Ameche Merchar (first and second instar hoppers at densities of 2000-5000 per hectare over 60 hectares), Tamache (1834M/0238E) over 150 hectares and in Cumfassen (1831M/0132E) over 70 hectares.

In early October there were further observations on these populations: in oued Edjerer (1826N/0205E) immature adults were present at an average density of 50 per hectare over an area of 20 hectares of drying Sorghum aethiopicum; Tin Essako (1815N/0240E) first to fourth instar hoppers at 1500 per hectare and immature and mature adults at 10 per hectare over an area of 1500 hectares of Tribulus ochroleucus, Chrozophora, Colocynthis; Tin Eze (1816N/0243E) first to fifth instar hoppers at 1250 per hectare and immature and mature adults at 25 per hectare over an area of 1500 hectares and In Cumfassen (1827N/0251E) hoppers of all instars at a mean density of 3000 per hectare and adults at a mean density of 200 per hectare, of which 20% were mature, over an area of 1300 hectares of Tribulus ochroleucus and Schouwia beginning to dry out. There was a total of some 8 000 000 individuals in these populations.

NIGER

In September some mature adults and one fledgling were found in oued Afagag (2001N/0717E).

In early October low density adults were reported from Tazerzait.

NORTH-WEST AFRICA

Meteorology

It will be recalled that in Summary No. 73 there were heavy rains in Algeria, Tunisia and Libya during the first half of October, while Morocco was sheltered from the bad weather. In the second half of October only Libya and Tunisia experienced thunderstorms of Mediterranean origin, which gave 20-40 mm of rain. In the recession area there were scattered showers; for example Ghadames recorded 6 mm and Djelfa 7 mm on 30 October.

In the first decade of November heavy rain of Atlantic origin reached Morocco and then Algeria, including the northern Sahara. According to the GTS, on 5 November Marrakech received 97 mm, Tangier 68 mm, Casablanca 48 mm, Taza 36 mm, Fes-Sais 30 mm, Essaouira 17 mm, and Agadir 16 mm. On 7 November Essaouira received 43 mm while on 8 November Agadir received 31 mm. Bechar received 4 mm on 9 November and 15 mm on 10 November while Beni Abbes received 13 mm and Oran 25 mm.

Maximum daily temperatures were very variable, ranging from 20° to 30°C in coastal regions, but exceeding 35°C in interior areas.

Breeding conditions

No NOAA/AVHRR imagery is available but the rains of 30 September will have created favourable breeding conditions in south-west Algeria.

Locusts

No locusts were recorded in the region in August and September.

EASTERN AFRICA

Meteorology

The relative characteristics of the ITCZ up to 10 October and in particular the thermoconvective thunderstorms, of which the most typical gave 33 mm of rain at Neghelli on 10 October were reported in Summary No. 73. During the second and third decades of October the rain moved south as the ITCZ continued its southward progression.

There was no evidence of rain along the Red Sea or Gulf of Aden coasts.

Breeding conditions

Both NOAA/AVHRR and Meteosat imagery indicate that conditions are generally unfavourable for breeding along the Red Sea and Gulf of Aden coasts, but may be favourable locally in areas which received summer floods.

Locusts

No locusts have been reported from the Region.

NEAR EAST

Meteorology

GTS data and Meteosat imagery indicated a thundery tendency along the Tihama of Saudi Arabia at the beginning of October which moved towards the Gulf during the second decade, while the third decade was characterised by renewed sandstorms particularly in the centre of the Arabian peninsula. On 27 October there were scattered showers over the Yemen highlands.

On 30 October a combination of a frontal system coming from Egypt and warm moist air from the Arabian Sea triggered deep instability over western Arabia and provoked exceptionally heavy rain. According to the GTS Medina received 100 mm. Information from Dr. Nizar Tawfig, Director-General of the Saudi Arabian National Meteorological and Environmental Center (NMEC) stated that Al Wajh had received 122 mm. Two days later Hail and Qassim were affected by the weather which later began to affect the Gulf as far south as northern Cman. On 11 November the FAO Regional Locust Officer in Jeddah reported that further heavy rain had fallen in Hail, Tabuk, Quirite, Qassim, Qaisumah and Al Ula areas. Light showers were also reported from Jizan.

The Red Sea Convergence Zone was generally in the vicinity of 20°N but moved up to 25°N during the cyclogenesis of 30 October.

Breeding conditions

According to a late report from the Yemen Arab Republic there were good rains throughout the country during September, many wadis were in flood and the vegetation was green. Conditions were therefore suitable for breeding but in Yemen FDR ecological conditions were unfavourable for breeding. There were probably becoming favourable locally on the southern Tihama of Saudi Arabia.

Locusts

No locusts were reported from SAUDI ARABIA and the PEOPLE'S DEMOCRATIC REPUBLIC OF YEMEN. No other reports were received from the Region.

SOUTH-WEST ASIA

Meteorology

As stated in Summary No. 73 the start of October coincided with a marked decrease in rainfall in the summer breeding areas of Pakistan and India. The continental high pressure built up with several ridges extending as far south as 20°N by the end of October. Daily maximum temperatures frequently ranged from 30°C in coastal areas to 40°C in the interior.

It will be recalled that synoptic data from Iran are not transmitted by the GTS so the only information available on rainfall is from Meteosat which showed there was rain between 25° and 35°N on 10-11 November. It is hoped that rainfall data from Iran will soon be provided directly by the Iranian Meteorological Service.

Breeding conditions

Conditions were no longer favourable for breeding in the summer breeding areas of Pakistan.

Locusts

INDIA

Scattered adults were found at two localities in Bikaner and Barmer districts during the first half of October.

No locusts were reported from PAKISTAN during the first half of October or the first half of November. AFGHANISTAN was reported clear in September.

FORECAST FOR DECEMBER 1984 - JANUARY 1985

The Desert Locust situation remains exceptionally calm. The most significant recent event has been the discovery of breeding in Malian Tamesna but this was restricted in extent and poses no threat.

In West Africa the new generation adults will survive in overwintering habitats such as are provided by clumps of green Panicum, Lasiurus, Cornulaca in wadi beds in and around the Adrar des Iforas in Mali. Elsewhere only very small numbers of adults will survive.

In North-West Africa small numbers of adults may have reached southern Algeria and a few many reach central and western Algeria and possibly southern Morocco. Some adults may persist in Libyan oases.

In <u>Fastern Africa</u> small numbers of adults will occur on the Red Sea coastal plains of Sudan and Ethiopia and localised breeding will occur in areas which received summer flood or winter rains. Small numbers of adults may also occur along the northern coastal plains of Somalia and will breed if ecological conditions become suitable.

In the <u>Near Fast</u> small numbers of adults are likely to have reached the Tihama of Saudi Arabia and Yemen AR and will breed in areas where ecological conditions become suitable. Small numbers of adults are likely to persist in Yemen PDR.

In South-West Asia small numbers of adults will occur in Baluchistan in Pakistan and others will persist in the summer breeding areas.

Rome
15 November 1984

