

FOOD AND AGRICULTURE **ORGANIZATION** OF THE **UNITED NATIONS** ORGANISATION DES NATIONS UNIES POUR L'ALIMENTATION

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DESERT LOCUST SITUATION SUMMARY AND FORECAST

97 SEPTEMBER - EARLY OCTOBER 1986 NO.

SUMMARY

There has been widespread congregans breeding in Mali, Niger, Sudan, Ethiopia, Yemen PDR, Oman and India and a number of small swarms have been produced. Control operations have been mounted in all areas and considerable numbers of adults are likely to reach winter-spring breeding areas in North-West Africa and around the Red Sea and Gulf of Aden.

·WESTERN AFRICA

Meteorology

During September the Intertropical Front reached 24^ON over the Western Sahara and Mauritania but only 17^ON over Chad. Low pressure over the Western Mediterranean weakened the effect of the Azores anticyclone and resulted in several pulls of the FIT across the Sahara. There were much above average rains over southern and northern Mauritania, western Mali and extensive areas of Niger, Kiffa recording 23mm on 25 and 26 September respectively. By late September the FIT had moved south to around 15-16 N over Mauritania, Mali and western Niger and to 14 N over eastern Niger, and the harmattan became established over the main breeding areas.

Breeding Conditions

According to NOAA/AVHRR imagery there were good breeding conditions in the Tilemsi valley at 18-19 N, and in eastern Tamesna and western Air in Niger.

Locusts

As reported in Summary No. 96, three mature swarmlets measuring 6, 15 and 8 hectares were found in Airbyajoint OCLALAV-Algerian ground survey team on 21 September. Subsequently, the following populations/control measures have been reported.

On 29 September, 1,000 hectares of gregarious locusts were controlled using Dieldrin 100 Km west of Iferouane by OCLALAV, and 900 hectares of laying adults were found 80 km north-east of Arlit. Aerial and ground surveys were in progress. On 30 September laying swarmlets were reported 110 km east of Iferouane and Dieldrin was applied by exhaust nozzle sprayer against laying swarms measuring 29, 16 and 30 hectares at Oued Aghli (1901N/0740E), Tin Ekert (1902N/0738E) and Assoliak (1954N/0745E). On 4-6 October 8,800 hectares laying adults at densities of 1-5 per square metre were treated with Dieldrin by air 60 km north—west of Iferouane. At Tagora (1755N/0810E) 1,00 hectares of copulating and laying adults and second to fourth instar hoppers at densities of 20-30 per square meter sprayed with Dieldrin using exhaust nozzle sprayer.

In Tamesna up to 8 October, mature adults were found over 3 hectares at Arake Melen (1912N/0550E), mature and immature adult were found over 5 hectares at Ekecheker (1910N/0546E). On 13-14 October 800 hectares of first and second instar hoppers and grey and yellow adults at densities of 50-100/m² were sprayed in these areas. On 8 October mature and immature adults were found at densities of 200-300 per hectare over 600 hectares at Aghlen Niklan (1756N/0536E) and were being controlled. In the week ending 16 October, hoppers were seen over a small area at Mamanat, 80 kilometres north of Arlit and young hoppers and young adults at densities of 1,500-4,000 per hectare were treated over 400 hectares at Bogorat (1916N/0742E)

MALI

According to a telex dated 13 October a copulating and laying swarmlet of 5 ha was seen in Oued Edjerer de Tamaradjant (1927N/0210E) 45 km west of Tin Esako. Five other mature swarmlets all smaller than 2.5 ha were seen 100 km north-east of Tin Esako at about 1905N/0305E. Hatching was in progress. By 20 October 3,000 hectares had been treated, of which 1,800 hectares were in one area.

Adults and first to third instar hoppers were also found in the Bouressa Basin, Timetrine and in southern and western Adrar des Iforas at densities of 100-250 per hectare.

MAURITANIA

There has been a report of Desert Locusts at a density of 5 per square meter over 300 hectares in south-west Mauritania.

CHAD

Scattered adults were captured in several localities during August and September.

NORTH-WEST AFRICA

Meteorology

The Maghrab was laternately under the influence of weak ridges and of disturbances of Atlantic origin. Meteosat imagery showed several cases of cyclogenesis resulting from the interaction of the depressions and cold fronts. One on 22 September extended to southern Libya. According to the GTS daily rainfall totals generally did not exceed 5mm in the first three weeks of September. In the last week of September and the first week of October there was frequent rainfall and on 30 September Ghardaia reported 113mm, 22 times the mean of September.

Breeding Conditions

According to NOAA/AVHRR imagery the only area within the recession area which provided good breeding conditions was Kufra oasis.

Locusts

No locusts were reported from the Region.

EASTERN AFRICA

Meteorology

The ITCZ moved from north of Khartoum in early September to around 10°N over Sudan and to around 6°N over the Horn of Africa on 20 October. To the north of the ITCZ the air was hot and dry while to the south there was thermoconvective rain particularly over the Ethiopian highlands and which at times extended to the southern Red Sea.

Breeding Conditions

According to NOAA/AVHRR imagery conditions were favourable for breeding up to about 15 N across Sudan, extending to 16 N in Darfur and Kassala provinces in early September, retreating southwards in late September and early October. The northern coastal plains of Somalia were reported to be dry in eartly October.

Locusts

SUDAN

In the Eastern Region, as reported in Summary No. 96, control operations against late instar hoppers and adults east of Kassala were virtually completed by mid-September. In mid-October isolated adults were present in the Gash delta (15N/36E) and hatching had occurred in Wadi Odi (16N/36E). Control operations were still continuing in Khors Talguharai and Arab in Musmar district. There was also an unconfirmed report of Desert Locusts from the Tokar Delta.

In the Northern Region, low density adults and egg-fields have been found at Quz Abu Dulu: (1650N/3310E). Isolated copulating adults were seen at three localities east of the river Atbara.

In the Western Region, first to fourth instar hoppers were present at 11 localities totalling 8,500 hectares in the Mughanuss area (1411N/3048E); first to fifth instar hoppers were present in 10 localities totalling 16,000 hectares in the Umm Seiyala area (1424N/3111E); large areas in the Hamrat El Wiz area (1409N/3008E) infested by first and second instar hoppers. Ground control measures were in progress and aerial spraying due to start second half of October. In Northern Darfur, scattered adults were reported from the El Fasher area.

ETHIOPIA

As reported in Summary No. 96 hopper bands of mixed instars were marching into Sudan east of Kassala, but the extent of this infestation was unknown. Hoppers were reported in Wadi Saua (1545N/3656E - 1545N/3659E) in early September.

Helicopter and ground surveys located the following populations in the period 15-25 September:

- Aligider-Tessenei: 100 adults per hectare in natural vegetation over an unspecified area. this area also contained grasshoppers and was ground sprayed in late September.
- Agordat: 30 adults per hectare over unknown area; this area also contained grasshoppers and was ground sprayed in late September.
- Barentu: scattered adults

In late September there was an unconfirmed report of a swarm in northern Eritrea.

No Desert Locusts were reported during period 1-10 October.

SOMALIA

Ground surveys found scattered adults at several localities between Bossaso (1114N/4900E) and Jarub (1050N/4546E), the maximum density being 65 in one kilometre at 1107N/4738E.

There were no reports from DJIBOUTI, KENYA, TANZANIA ond UGANDA.

NEAR EAST

Meteorology

The large heat low pressure area persisted over the Arabian peninsula and there were thermoconvective rains over the highlands of the Hijaz and the Yemen Arab Republic.

Breeding Conditions

Conditions were reported to be favourable for breeding on the Tiliama of the Yemen Arab Republic and in some areas east of Aden. The Saudi Tihama was reported to be dry.

Locusts

PEOPLE'S DEMOCRATIC REPUBLIC OF YEMEN

As reported in Summary No. 96, there were report of locusts at various densities from eastern PDR Yemen in early September. Ground survey teams found adults at high densities for 60 kilometres in Wadi Sa'af, where there had been no rain, and some breeding near Hayrut. Ground control was in progress.

During the week 20-27 September further infestations of mixed solitarious and gregarious second to fifth instar hoppers and young adults were found in Wadi Al-Rahabh (1354N/4725E) and copulating adults were found at high densities at Musalam (1355N/4724E). On 19 September a swarm laid eggs over 0.5 square kilometres at Irqah (1339N/4716E). Low density copulating and laying adults were observed in Wadi Maseb (1334N/4633E) on 28 September. Control was in progress using Dieldrin and Fenitrothion. By mid-October there were patches of hoppers at Irqah, and one hopper band was seen in Wadi Maseb. The gross infested area was estimated at 750 square kilometres and was being controlled.

OMAN

In a telex dated 14 October, it was stated that ground surveys had located hoppers and adults forming groups in the Sharqia.

Earlier, mature adults were reported in cultivations in Bureimi at densities of 30-40 per field (2-3 acres) in July, and a few adults were reported in Wadis Sal and Mur and at Beni Bu Ali (22-23N/58-59E) in August.

SAUDI ARABIA

There was an unconfirmed report of a swarm in Saudi Arabia.

IRAQ was reported clear in August and September. No other reports were received from the Region.

SOUTH-WEST ASIA

Meteorology

High pressure over the Himalayas extended southwards, marking the transition from the summer monsoon to the winter monsoon.

There was only scattered rainfall in the Summer breeding area in the first half of September and none was reported in the second half of the month.

Breeding Conditions

Vegetation was reported to be drying in the summer breeding area in the first half of September. However conditions were still suitable for laying locally.

Locusts

PAKISTAN

On 17 September a 4 square kilometre mature swarm was reported at Kanewari (2625N/6958E) and a loose group was reported from Samrahu (2627N/6958E) on 19 September. Small pockets of hatchings over 2 square kilometres were controlled on 29 September using 50 kg of 12.5% BHC dust.

In the first half of September acattered adults were found at numerous localities in the Uthal, Mirpurkhas, Sukkur, Bahawalpur and Rahimyar Khan areas, the maximum density being 3,750 per square kilometre at Renhal (2812N/2158E) on 11 September. Low density hoppers were found at 9 localities in Sukkur and Bahawalpur areas in the first half of September.

INDIA

Small patchy infestations of solitaricolor-gregaricolor hoppers of all instars and fledglings were controlled by air and ground at several localities totalling 10,091 hectares in Bikaner and Jaisalmer districts using 19,050 kg of BHC 10% dust, 1,500 litres of 18% Dieldrin and 3,500 kg of Malathion ULV during the first half of September. In

addition low density adults were seen at 113 localities in Bikaner, Ganganagar, Barmer, Jaisalmer, Judhpur, Churu and Banaskantha districts. Scattered hoppers were also found in four localities in Bikaner and Jaisalmer districts.

There were no reports from AFGHANISTAN or IRAN.

FORECAST FOR NOVEMBER - DECEMBER 1986

There has been widespread congregans breeding in the summer breeding areas in Mali, Niger, Sudan, Ethiopia, Yemen PDR, Oman and India and a number of small swarms have been produced. Control operations have been mounted in all areas but considerable number of adults are likely to reach the winter-spring breeding areas.

In <u>West Africa</u> there may be further congregans breeding in restricted areas in Air and Tamesna in Niger and in Tamesna, Adrar des Iforas, the Tilemsi Valley and Timetrine in Mali and a few small swarms may be produced unless the breeding is controlled. Some adults are likely to reach Mauritania but they are unlikely to breed.

In North-West Africa considerable number of adults may reach central and western Algeria and south-eastern Morocco from West Africa, possibly including some groups. There will now be no invasion from Sudan.

In <u>Eastern Africa</u> breeding in the interior of Sudan will terminate and increasing number of adults including groups will appear in the Red Sea coasts of Ethiopia and Sudan and will start to breed. Increasing number of adults, which could include groups from Arabia, will occur on the northern coastal plains of Somalia and will start to breed. It is now unlikely that there will be any breeding in the Short Rains breeding area.

In the <u>Near East</u>, considerable number of adults, possibly including one or two <u>small</u> swarms may be produced in PDR Yemen. Congregans breeding may continue in coastal and some interior areas of PDR Yemen and is likely to spread to the Tihama of Yemen AR and to the southern Tihama of Saudi Arabia. Breeding will probably end in Oman and any escapes which could include groups are likely to move to south-west Arabia.

In <u>South-West Asia</u> breeding in the summer breeding areas will terminate and control should prevent the formation of any swarms. Increasing number of adults will reach the winter-spring breeding areas in Baluchistan of Pakistan and Baluchistan-Seistan of south-east Iran.

Rome 22 October 1986

