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منظمة الأغذية والزراعة للذمم 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. 103 MARCH-EARLY APRIL 1987

SUMMARY

The largest populations were on the Red Sea coastal plains of Sudan and Ethiopia. Despite aerial and ground control operations several swarms formed and laid giving rise to further hopper infestations. These were also being controlled and further swarm formation should be prevented. Gregarious breeding was also in progress on the northern Tihama of Yemen Arab Republic. Elsewhere there was small scale breeding on the Jizan Tihama of Saudi Arabia, and scattered adults in Mauritania, Pakistan and India.

WEST AFRICA

Meteorology

The Intertropical Convergence Zone lay over the Gulf of Guinea states for most of March. One northward push during the first decade of March gave some moderate falls of rain in Mali, Niger and Burkina Faso. Thundertorms were reported north and north-east of Aioun el-Atrouss on 14 March and south of Gao on 27 March.

Breeding conditions

Conditions were unfavourable for breeding throughout the region.

Locusts

MAURITANIA

Some isolated individuals were seen in <u>Schouwia</u> in depressions in south-western Adrar.

There were no other reports from the region.

NORTH-WEST AFRICA

Meteorology

Northern and western areas of the Maghreb remained under the influence of mid-latitude depressions but the Desert Locust recession area only received light rains.

Breeding conditions

Breeding conditions were generally unfavourable.

Locusts

No locusts were reported.

EASTERN AFRICA

Meteorology

On the Red Sea coastal plains from 60 kilometres south of Massawa to the Tokar delta there were several periods of rain, notably on 1-2 March, 7-8 March, 19 March, 23-24 March (9 mm of rain recorded at Massawa airport on 24 March), 27 March and 5-7 April.

In mid-March there were widespread rains in Djibouti territory (Djibouti itself received 53 mm on 14 March) and north-western Somalia.

Breeding conditions

As a result of the frequent winter-spring rains many of the wadis and intervening areas from Zula to the Tokar delta were favourable for breeding. Conditions were also favourable in the Wadi Oko - Gabatit area of Sudan inland from the coastal mountains, and in Djibouti and north-western Somalia.

Locusts

SUDAN

RED SEA PROVINCE

On 4 March a medium density 20 square kilometre mature swarm was seen flying north-east over Karora and later the same day a dense 2 square kilometre mature swarm was seen flying north-east over Jebel Maharba (1747N/3822E). On 8 March a medium density 100 square kilometre swarm was seen flying north-east over Adarat (1805N/3821E). Ground control measures were applied against the three swarms. A further mature swarm, measuring 45 square kilometres was seen flying north-west over Jebel Halibai on 9 March.

On 13 March a medium density swarm settled over an area of 72 square kilometres in the Tokar delta, on 14 March a dense mature swarm measuring 39 square kilometres was seen flying north-east over the delta and copulation was observed. Finally, on 17 March a dense mature swarm was seen over an area of 108 square kilometres in the delta. On 20 March groups of adults were observed copulating and egg-fields were found over an area of 15 square kilometres.

In early March the Tokar delta was clear of hoppers but ground control was in progress against first instar hoppers in Khor Balatat and Khor Karora.

On 19 March there was renewed hatching of hoppers close to the Ethiopian border, the result of laying by the swarms which invaded the area in early March. 2,400 litres of Fenitrothion were applied by air over 1,151 hectares and ground control team applied 6 tonnes of HCH bait and 0.1 tonne of HCH dust. Later in the north there was also renewed hatching in the Tokar delta, leading to the formation of thin-medium density hopper bands, which were being controlled by air and ground.

In the Wadi Oko area ground control operations were undertaken against groups of adults in early March and against hopper bands over an area of 20 square kilometres from 7 March. By mid-March there were dense group of late instar hoppers and fledglings in the area which were being controlled and by the end of the month the area was reported to be clear.

NILE PROVINCE

Control continued against small hopper infestations on cultivations along the River Atbara in early March.

ETHIOPIA -

As reported in Summary Nos 101-102, a thin density swarm measuring 8 kilometres by 2 kilometres was sprayed with 200 litres of Fenitrothion north of Cavet on 3 March.

From 6 to 10 March three thin density swarms and late instar hopper infestations were controlled between Cavet and Mersa Teclai using 500 l Fenitrothion ULV, and 400 litres were applied against populations near Karora and near Mersa Gulbub. By 13 March only scattered locusts were seen between Gulbub and Karora.

On 14 March an aerial survey of the Wachiro (1547N/3916E) - Abarara (1604N/3904E) - foothills area revealed some small dense late instar bands and a 26 square kilometre thin density swarm. There were controlled with 200 litres of Fenitrothion. On 15 March a thin density swarm and some small thin density fifth instar hopper bands scattered over an area of 16 square kilometres were controlled with 200 litres of Fenitrothion. On 16 March a 40 square kilometre mature swarm at Emberemi (1543N/3925E) was controlled using 200 litres of Fenitrothion and on 17 March a further 1,200 litres of Fenitrothion were applied against swarms and hopper bands in the same area. By 18 March no traces of locusts were seen.

On 20 March a swarm measuring 3 kilometres per 12 kilometres was sprayed with 200 litres of Fenitrothion about 30 kilometres south of Massawa and on 22 March a further 3 medium density swarms totalling 8 square kilometres were controlled in the Ghedem (1522N/3928E) - Archico (1530N/3923E) area using 600 litres of Diazinon.

On 31 March-1 April 200 litres of diazinon and 400 litres of Ensodil were applied against early instar hoppers in the Emberemi, Adilo (1542N/3912E) and Sheb (1553N/3902E) areas. On 4 April control operations were concluded in these areas with the application of 60 litres of Ensodil against groups of early instar hopper within an area of 32 square kilometres.

There were no reports from SOMALIA, DJIBOUTI, KENYA, UGANDA or TANZANIA.

NEAR EAST

Meteorology

There was widespread rain on 2-3 March in northern and western parts of the Arabian peninsula, giving rise to floods in some areas. The same areas also came under the influence of successive Mediterranean depressions later in the month. There was also widespread moderate-heavy rainfall in many interior and coastal areas of Yemen PDR in the second half of March. Rain was reported from the Tihama of Yemen on 9 March.

Breeding conditions

Breeding conditions were reported to be favourable over most of Saudi Arabia, on the Yemen Tihama, over much of Yemen PDR and in Kuwait.

Locusts

YEMEN ARAB REPUBLIC

In mid-february adults were present at densities of about 300 per hectare over an area of some 600 square kilometres around Wadi Habil and there were also late instar hoppers. A limited amount of spraying was undertaken.

By mid-March many of the surviving adults had concentrated into an area of 8 kilometres per 8 kilometres between Wadis Bawhal and Hayran and were copulating and laying. Further hatching occurred in late March and early April when hopper bands of all instars were present and being controlled. There were also scattered immature and mature adults between Hayran and Maidi.

KINGDOM OF SAUDI ARABIA

According to a late report the infested area controlled south-east of Jizan in February was 600 square kilometres and not 200 as reported in Summary Nos 101-102. Some solitarious breeding was reported from the area in March and was controlled.

In early April Saudi Arabia was reported clear.

YEMEN PDR and EGYPT were reported clear in March.

There were no other reports from the Region.

SOUTH-WEST ASIA

Meteorology

There was widespread light to moderate throughout Baluchistan during March and insolated showers in West Rajasthan during the first half of March.

Breeding conditions

Conditions will have become favourable for breeding in Baluchistan.

Locusts

PAKISTAN

Scattered locusts were seen at densities of 1,500 per square kilometre at Shooli and Jiwani in the first half of March and at densities of 2,000 per square kilometre in the second half of the month.

INDIA

Scattered adults were found at a density fo 15 per square kilometre at Phalanwali (2833N/7245E) on 3 March.

IRAN was clear in February and March. There was no information from AFGHANISTAN.

FORECAST FOR MAY-JUNE 1987

This is a period of major redistribution of populations as adults produced in the winter-spring breeding areas move into the summer breeding areas. Control operations on both sides of the Red Sea should prevent the formation of swarms but sizeable lower density populations could move into the summer breeding areas.

In West Africa residual over-wintering populations may start to breed in the southern Saharan massifs if they receive pre-monsoon rains. It is most unlikely that there will be an invasion from the Central Region.

In North-West Africa very small scale breeding is likely to occur in south-western and south-eastern Morocco, Western Sahara and Western and Central Algeria.

In <u>Eastern Africa</u> gregarious breeding will terminate on the Red Sea coastal plains of Ethiopia and Sudan but sizeable non-swarming populations may survive control operations. Most of these will move westwards into the interior of Sudan and the western lowlands of Eritrea, some reaching as far west as Darfur, but others may persist in green vegetation in coastal areas.

In the <u>Near East</u> breeding is likely to continue on the northern Tihama of Yemen AR and some escapes may occur. These could move northwards along the Tihama or north-eastwards into the interior of Saudi Arabia, where they could breed again in areas of green vegetation.

In <u>South-West Asia</u> breeding will terminate in Baluchistan and increasing numbers of scattered adults will be found in the summer breeding areas. If there are pre-monsoon rains some localised breeding could occur towards the end of the forecast period.

For technical reasons the map to go with this summary will be despatched later.

Rome 16 April 1987

