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. 26 OCTOBER - EARLY NOVEMBER 1980

SUMMARY

Control operations were in progress against hopper bands and swarms in north-west Niger, north-east Mali and southern Algeria. Over 80 000 hectares have been treated but escapes, which have included at least one swarm, have reached northern-central Algeria and southern Morocco. Further movement will be restricted by low temperatures during the forecast period to the end of January. Hopper bands have been found on the Red Sea coast of Sudan and breeding is likely to become more widespread following early winter rains. Small numbers of adults have been reported from Saudi Arabia, Egypt and India.

DESERT LOCUST SITUATION, OCTOBER TO EARLY NOVEMBER 1980

NORTH-WEST AFRICA

ALGERIA

During October numerous infestations of hoppers and adults at high densities were found in Tamesna in the extreme south of the country. The main areas infested were oued Echid (0924N/0341E) where 300 hectares of mature adults at densities of 40 000 - 50 000 individuals per hectare were sprayed with moderate results on 7 October; oued Ched Begnou (1905N/0345E -1920N/0344E) where 450 hectares of first instar hopper bands at densities of 3 000 per square metre were sprayed with good results on 8 October, 8 hectares of hoppers were sprayed with good results on 13 October, 30 hectares of adults at densities of 150 per square metre in the process of forming a swarm were sprayed with poor results on 24 October and 3 hectares of fledglings at densities of 400-500 per square metre were sprayed with poor results on 27 October; oued In Tahount (1916N/0344E) where 600 hectares of laying adults at 40 000 - 50 000 per hectare were sprayed with moderate results on 9 october and 10 hectares of dense hopper bands were sprayed on 12 October with good results; oued Assissai (1911N/0354E) where 1000 hectares of mature adults at densities of 50 000 - 70 000 per hectare and several hopper bands were sprayed with moderate results on 14 October; and oued In Haar (1858N/0347E - 1900N/0343E) where a total of 4 180 hectares of hopper bands and fledglings were sprayed between 15 and 28 October. Good results were obtained against hoppers but were poor against adults. By the end of October a total of 8 000 hectares had been treated with 20 % malathion.

Elsewhere a survey team in the northern Adrar found traces of adults and other reports suggest that a substantial northward movement had occurred. In the second half of October scattered locusts were reported from Ahmet and Mouydir. A small swarm was reported from Ghardaia on 8 November and by 16 November many scattered locusts had been reported from western, central and eastern Algeria. Also in early November moderate rain was reported from Ghardaia and Ain Salah.

MOROCCO

In addition to the four adults captured at Er Rachidia on 16 October, increasing numbers of adults were captured in southern Morocco in the first half of November but no swarms or groups were reported.

LIBYA and TUNISIA were reported clear in October.

WEST AFRICA

NIGER

Control operations continued in the following areas of Tamesna: Kazamat, In Akarbai, Anes Baraka, Ekade, Malen, Aghlan Niklen, In Herchi, In Araben, Tabelok, Mbikas and Arabigou against mature adults at densities of 50 000 - 100 000 per hectare and hoppers of all instars at densities of 1 - 50 per square metre. A total of 74 130 hectares had been treated with 5 925 litres of fenitrothion ULV, 9 150 litres of 20% dieldrin and 5 885 litres of 5% dieldrin, by air and ground. At the end of October it was estimated that a further 10 000 - 15 000 hectares remained to be sprayed.

In the north of Air rain fell in the first decade of October and very favourable breeding conditions developed. Infestations of hoppers of all instars and immature adults were found in the Tassansimrad (1940N/0738E), In Tagaren (1940N/0739E), Tamanit (1943N/0748E) and Tassankola (1914N/0748E) areas and a total of 5 610 hectares were treated with 900 litres of 20% dieldrin and 645 litres of 5% dieldrin.

MALI

Conditions were becoming less favourable for breeding but there were still areas of green vegetation which favoured gregarisation. Groups of third to fifth instar transiticolor and gregaricolor hoppers at densities of 5 - 20 per square metre and immature adults at densities of 10 000 - 20 000 per hectare were present over a total area of 15 000 hectares in north-west Adrar des Iforas, the Bouressa basin in north-eastern Adrar des Iforas, Timetrine and Tamesna. Fledgling swarms, which took one hour to pass, were seen at In Oumfassen (1840N/0235E) on 25 October and Tin Essako on 28 October.

Ground control teams carried out the following control measures: 1-16 October in the Aguelhoc sector 825 hectares were treated with 850 litres of 5% dieldrin: 13-17 October in the Tin Essako sector 2 360 hectares were treated with 2 510 litres of 5% dieldrin: 17-31 October in the Amechekenchar sector 1 350 hectares were treated with 1 395 litres of 5% dieldrin. At the end of October it was estimated that a further 10 000 hectares remained to be treated in the north of Timetrine, Tamesna and the Bouressa basin.

No locusts were reported from MAURITANIA or CHAD.

EASTERN AFRICA

SUDAN

On a ground survey of Red Sea coastal areas from 21 to 29 September small numbers of adults were seen at Khor Adarkwan (2141N/3611E) in the northern sector.

In October scattered adults were found in four blocks of the Tokar delta at densities of 420 - 480 per hectare over a total area of 20 hectares. Isolated second instar hoppers were also found.

In early November groups of adults at densities of up to 4 320 per hectare and first to third instar hopper bands and fledglings were found in three blocks of the Tokar delta over a total area of 400 hectares. Control operations were in progress, and conditions were very favourable for breeding.

SOMALIA

Heavy rain was reported in coastal and sub-coastal areas between Berbera and Lukhaya in late September and widespread rainfall was reported from Hargeisa, Burao, Erigavo, Las Anod and Garoe areas on 22-27 September. Hargeisa recorded 135 mm on 25 September.

There was further good rainfall in October in coastal and sub-coastal areas and along the escarpment from Hargeisa to Las Khoreh, and vegetation was reported to be very green.

No locusts were reported.

No locusts were reported from ETHIOPIA, DJIBOUTI, KENYA, TANZANIA or UGANDA.

NEAR EAST

KINGDOM OF SAUDI ARABIA

In October light to heavy rain was reported from the Hijaz and Asir mountains and from many northern and north-western areas. Small numbers of adults were seen at three localities in the Jizan Tihama.

In November increasing numbers of maturing locusts were recorded south of Shaqqah ash Shamaliyah on the southern Tihama where conditions were favourable for breeding and in limited areas around Jeddah. The maximum density was 150 per hectare.

YEMEN ARAB REPUBLIC

Heavy rain was reported in the Tihama on 4 October and again at the end of October. No locusts were reported.

EGYPT

As a result of showers many valleys in the south-eastern desert were becoming favourable for breeding. A few solitarious adults were seen in areas adjacent to the Sudan border.

No locusts were reported from the PEOPLE'S DEMOCRATIC REPUBLIC OF YEMEN and KUWAIT. No reports were received from IRAQ, JORDAN, OMAN or the UNITED ARAB EMIRATES.

SOUTH-WEST ASIA

INDIA

Small numbers of solitarious adults were recorded from 13 localities in Jaisalmer district, 3 in Bikaner district and 1 in Jodhpur district during the month, the highest density being 150 per square kilometre in Jaisalmer district.

No locusts were seen in PAKISTAN during October.

No report was received from AFGHANISTAN or IRAN.

FORECAST FOR DECEMBER 1980 - JANUARY 1981

The most important populations are in north-west Niger, north-east Mali and southern Algeria, where hopper bands and swarms have already formed and in Sudan where hopper bands have formed. Considerable numbers of adults have moved north reaching northern-central Algeria and southern Morocco. Further movement during the forecast period is likely to be more restricted due to low temperatures. Breeding will continue on the Red Sea coast of Sudan where fledglings will appear in early December and may start in border areas with Egypt. These will mature and lay and give rise to a second generation of hoppers. Breeding will commence on the Tihamas of Saudi Arabia and the Yemen Arab Republic and is probably in progress on the Red Sea coast of Ethiopia. Small-scale breeding will probably occur on the northern coast of Somalia. Elsewhere small numbers of adults will occur in the People's Democratic Republic of Yemen, the Mekran of Pakistan and Iran and Rajasthan of India.

In <u>West Africa</u> breeding will be on a reduced scale in the Adrar des Iforas, Tamesna, Tilemsi and Timetrine areas of north-east Mali, and in Tamesna and Aïr in north-west Niger. There may be considerable numbers of survivors from control operations which will overwinter within, or close to, the breeding areas. Further emigration northwards is unlikely except during spells of warm southerly winds. Small numbers of adults will occur in Mauritania and there may be small-scale breeding. It is possible that large numbers of adults could reach Mauritania from the north-east and these could result in breeding on a more extensive scale.

In North-West Africa breeding will be on a reduced scale in southern Algeria. Immigration from the south is likely to be a reduced scale and confined to periods of warm southerly winds. The movement by adults already present in southern Morocco, western, central and eastern Algeria is likely to be more restricted than in October and November but some adults could reach southern Tunisia and western Libya. Breeding is not likely during the forecast period.

In Eastern Africa breeding will continue in the Tokar delta of the Sudan and fledglings will appear from early December. These will mature, lay and give rise to a second generation of hoppers. Breeding will almost certainly occur in other coastal areas of Sudan and could result in the formation of groups of hoppers and may start in border areas with Egypt. Breeding is probably in progress on the Red Sea coast of Ethiopia and may be on a scale sufficient to produce hopper bands and even some small swarms. Small—scale breeding will probably occur on the northern coastal and sub-coastal plains of Somalia.

In the <u>Near East</u> increasing numbers of adults will occur on the Tihamas of Saudi Arabia and the Yemen Arab Republic. Breeding will commence in both areas and could result in the formation of groups of hoppers. Only small numbers of adults are likely to be present in the People's Democratic Republic of Yemen; some small-scale breeding could occur in coastal areas and the interior. Very few adults might be present in Oman and the United Arab Emirates.

In <u>South-West Asia</u> small numbers of adults will be present in the Mekran of Pakistan and Iran, and in Rajasthan of India. Breeding will not occur in the forecast period.

Rome 25 November 1980

