ORGANISATION DES NATIONS UNIES POUR L'ALIMENTATION ET L'AGRICULTURE



ORGANIZACION DE LAS NACIONES UNIDAS PARA LA AGRICULTURA Y LA ALIMENTACION

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Locusts, other migratory pests and emergency operations group

DESERT LOCUST SITUATION SUMMARY AND FORECAST

No. 25 September - early October 1980

SUMMARY

There has been a very rapid increase in numbers in north-west Niger and north-east Mali as a result of widespread rain between June and August. Hoppers and adults have been observed at densities comparable with high density gregarious populations and daytime flight has been observed. Aerial and ground control operations are in progress in both countries and in southern Algeria. There has been localised breeding in Egypt and Iran and small numbers of adults have been recorded in Morocco, Mauritania, People's Democratic Republic of Yemen and India.

In October ground control operations continued up to the 18th in Tamesna and south-eastern Adrar des Iforas against groups of hoppers of all instars and young adults at densities of 100,000 per hectare over an area of 10,000 hectares. Mature adults were also present. In cueds in the Bouressa basin (1950N/0155E) young adults were found at densities of 30,000 - 100,000 per hectare over an area of 10,000 hectares.

NIGER

According to a report for August only a few mature adults were found during surveys; 60 per hectare were present at Takriza (1850N/0745E) and 1-2 per hectare over an area of 300 hectares at Teznat. One adult was captured at Rerewa (1332N/1130E) and another at Kosseiri (1343N/1125E) on 6 and 7 August respectively.

In September almost all valleys in Tamesna to the north of In Abangarhit were infested with hoppers at densities of 25 to 50 per square metre and by immature, mature, copulating and laying adults at densities of 50,000 to 100,000 per hectare. The total area infested was estimated at 5,000 hectares but further surveys and aerial control measures were planned.

By 18 Cctober there were hoppers of all instars at densities of 10,000 - 500,000 per hectare and mature adults at densities of 750,000 per hectare in the area north of In Abangarhit bounded by 1805N-1845N, 0505E-0703E. A total of 52,630 hectares had already been sprayed and it was anticipated that a further 20,000 hectares would need to be treated, including areas in which further hatching was anticipated.

EASTERN AFRICA

During August isolated hoppers were reported from the area between Jebel Arushkul (1405N/3215E) and Hashabat El Maganin (1346N/5127E) in Ed Dueim district in SUDAN, and a few scattered adults were seen in Northern Kordofan Province.

No reports have been received for September.

NEAR EAST

Weather

In Saudi Arabia there was heavy rain in the Asir mountains east of Jizan and scattered showers in other parts of the Asir and Hijaz mountains. Most of the Tihama was dry, except for cultivated areas north—east of Jizan and some wadis. Isolated showers were reported from Yemen Tihama in September, but on 4 October there was heavy rain. In the People's Democratic Republic of Yemen there was good rain between Dathina and Mahfed on 24 September and isolated showers elsewhere in mountainous areas in the interior.

KINGDOM OF SAUDI ARABIA

Three adults were reported from Saja.

PEOPLE'S DEMOCRATIC REPUBLIC OF YEMEN

A total of 16 adults were seen in three localities.

EGYPT

Small numbers of solitariform adults and third and fourth instar hoppers were found in cultivations at Toshka (2228N/3132E) adjacent to Lake Nasser at densities of about 400 per square kilometre.

YEMEN ARAB REPUBLIC and KUWAIT were reported clear. IRAQ was reported clear in August. No other reports have been received.

SOUTH-WEST ASIA

Weather

Scattered rain was reported from Rajasthan up to 21 September.

IRAN '

A population of adults and fourth and fifth instar hoppers was found 25 km north-east of Zabol (3100N/6132E) on 8 September. Their density was 1,000 per hectare. Damage was reported over an area of 4-5 square kilometres. Conditions were favourable for further breeding as the area lies within the delta of the Helmand river. 7,935 kg of BHC bran bait and 163 litres of 40% aldrin E.C. were applied and the infestation was completely killed by 25 September.

INDIA

In the first fortnight of September immature and maturing adults were reported from 10 localities in Bikaner district, 2 from Barner and one each from Churu and Jodhpur districts. The maximum density was 600 per square kilometre. In the second fortnight scattered maturing adults were found at three localities in Bikaner, Churu and Jaisalmer districts at a maximum density of 50 per square kilometre.

PAKISTAN

In the first half of August solitary adults were reported from Rukunpur (2843N/7208E), Derawar (2847N/7120E), Bijnot (2806N/7141E) and Vinjhor areas of Cholistan at densities ranging from 300 to 900 per square kilometre. In the second half a maximum of seven adults were seen at 20 localities in the Tharparkar, Nara and Cholistan deserts.

No locusts were reported in September.

AFGHANISTAN was reported clear.

^{*}Information received since map was prepared.

FORECAST FOR NOVEMBER-DECEMBER 1980

Following widespread rainfall in the southern Sahara from June to August high density hoppers and adults have been produced in north-west Niger, north-east Mali and southern Algeria. The success of control operations currently in progress in these areas will be crucial in determining the numbers which survive to breed in North-West Africa in the spring of 1981. Elsewhere recorded breeding has been on a very limited scale and only small numbers of adults are likely to reach traditional winter-early spring breeding areas around the Red Sea and Gulf of Aden, the Mekran of Pakistan and Iran and eastern Arabia.

In West Africa breeding is likely to end in the Adrar des Iforas, Tilemsi and Timetrine areas of Mali and Tamesna of Niger. Unless survey and control teams are able to locate and destroy all major infestations rapidly, swarms will be produced which could reach most countries of North Africa in the forecast period. There is evidence that considerable numbers of adults have already reached southern Algeria and further emigration must be expected. Considerable numbers of adults may persist in Mali and Niger and these could breed again in especially favourable habitats. It is possible that Mauritania could be invaded by considerable numbers of adults from the north.

In North-West Africa breeding is likely to be restricted to southern Algeria. The scale and extent of immigration from the south will depend on the success of control operations but the possibility that considerable numbers of adults, including swarms, will reach the Region cannot be ruled out. If swarms do enter, they could reach southern Morocco, most parts of Algeria south of 30°S, the Fezzan of Libya and possibly other parts of Libya and even Egypt.

In <u>Eastern Africa</u> adults produced in the interior of Sudan and adjacent areas of Ethiopia on summer rains will reach the Red Sea coast of both countries. They may be in sufficient numbers to form groups, particularly in those areas which received summer floods such as the Tokar delta. Breeding will start but initially it will be mainly at low densities. Some adults may reach the northern coastal plains of Somalia, where low density breeding is likely to start.

In the Near East the number of adults will rise on the Tihamas of the Kingdom of Saudi Arabia and the Yemen Arab Republic and breeding will start in areas which have received summer floods or which receive early winter rains. Low density breeding may also occur in the People's Democratic Republic of Yemen. It is possible that Egypt may be invaded from the west by swarms. Localised breeding is likely to continue around lake Nasser.

In <u>South-West Asia</u> only small numbers of adults are likely to have been produced on summer rains. Most are likely to move to Lasbela and the Mekran of Pakistan and some may reach south-east Iran. Small numbers will persist in Rajasthan in India and adjacent areas of Pakistan.

Rome
23 October 1980

