

FOOD AND AGRICULTURE ORGANIZATION OF THE

ORGANISATION DES NATIONS UNIES POUR L'ALIMENTATION ET L'AGRICULTURE Y LA ALIMENTACION

ORGANIZACION DE LAS NACIONES UNIDAS PARA LA AGRICULTURA

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. 113

JANUARY - EARLY FEBRUARY 1988

SUMMARY

Unprecedentedly widespread gregarious breeding continued in northern Mauritania, Western Sahara, southern Morocco and western Algeria. Despite control operations numerous swarms were produced in February. Some moved north and reached southern Morocco and western Algeria but others matured close to where they were formed and started to lay. New hatching started in late February in northern Mauritania.

Considerable numbers of adults persisted in north-eastern Mali, where there was also small scale breeding, and in Niger. A small swarm was seen on the Red Sea coast of Sudan and small scale gregarious breeding was being controlled. There were no reports from the Arabian peninsula or the Eastern Region.

WESTEN AFRICA

Meteorology

The Intertropical Convergence Zone (ITCZ) lay at between 5° and 7°N during January. To the north of the ITCZ the surface wind was generally easterly 5-10 kts, becoming NNE 15-20 kts along the coast of Mauritania and Senegal in mid-January. In northern Mauritania daily maximum temperatures were 23-27°C; the weather was hazy, there were some dust storms and there were traces of rain.

Breeding conditions

Breeding conditions continued to be extremely favourable in northern Mauritania during January due to the rains which fell between September and December and to the heavy dew. South of Atar conditions were becoming less favourable. Conditions were also favourable for breeding in some localised areas of Tamesna in Mali.

Locusts

MAURITANIA

Widespread breeding continued in Tiris-Zemmour. By mid-February most of the population was adult. Further laying was reported but some swarms were moving out of the breeding areas.

TIRIS-ZEMMOUR

In early January three main areas of breeding had been located totalling 83,000 ha in the vicinity of Tourassine (2439N/1122W), bounded by 2409-2455N, 1100-1120W; 2409-2416N, 1120-1140W and 2427-2440N, 1120-1140W. Hoppers of all instars were present, and hatching and band formation were in progress.

By the end of January the gross area infested was estimated at 260,000 ha, and 40-70% of the population had reached the adult stage. Further hatching continued throughout the month.

By early February a joint Maghrebine/Mauritania/FAO mission concluded that the infestations extended from Choum (2118N/1259W) to Garat Djebilet (2650N/0745W) in western Algeria and that the heaviest infestations encountered lay between Zouerate and Tourassine. They estimated that some 300,000 ha needed immediate treatment and that the total area which might need treatment might be 1,000,000 ha. In southern areas 80-90% of the population had fledged, but less further north. No surveys from the south extended beyond 45 km north-east of Bir Moghrein. Further hatching was reported on 22 February near Zouerate.

As reported in Summary No. 112 on 2 sq km mature swarm was seen 10 km south-east of Tourassine in early January, and low density immature adults were seen at Louberat wells (2326N/1155W). On 17 January a laying swarm covering 8 sq km was seen 5 km south-east of Tenyamoun (2316N/1235W).

New generation swarms started to form in late January. A dense swarm was seen near Char (2130N/1252W) on 12 February. Several swarms were reported moving north—east and north—west on 14 February, another moving north—west on 17 February and a 54 sq km swarm was reported settled south—east of Tourassine on 18 February.

During January 84,536 ha had been treated; by 22 February the area had increased to 201,596 ha, using 60,700 l Fenitrothion 500, 17,180 l Fenitrothion 1000 and 74,478 kg Propoxur 2% dust.

INCHIRI

Laying swarms were reported from Nouadhibou on 6 January. Some ground control was undertaken but there have been no reports of hoppers from the area.

MALI

In the first decade of January there were a few swarms in Tamesna, and groups of hoppers were present in Oued Tin Tamayot (1716N/0332E). In central Adrar des Iforas and northern Timetrine adults at densities of less than 10 to 100 per square metre persisted over areas of tens of hectares. On 6 January a dense low flying swarm flew west-north-west over Aguelhoc; on the same day a swarm, density 5-100 per square metre, was seen in Oued Eleoudj and departed to the west. On 10 January some copulating and laying adults were seen at 1927N/0129E. In the first decade of January 9,137 ha of infestations were treated with 875 l of Malathion and 3,530 l of Fenitrothion 50 ULV.

There were no reports from NIGER or CHAD.

ATLANTIC OCEAN

Isolated yellow locust landed on a ship at 2050N/1700W on 25 January. Species not known.

A single locust, species unknown, was found on board a ship at 1916N, 1745 W at 1145 GMT on 24 February.

NORTH-WEST AFRICA

Meteorology

There was widespread raifall in January in Morocco and northern western Sahara, and further rain around Laayoune in mid-February. In south-eastern Algeria Djanet received 21 mm from 1 to 5 January.

Breeding conditions

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NOAA/AVHRR imagery confirmed the presence of abundant vegetation on the Tiris region of Western Sahara and Oued Draa in southern Morocco in January. The vegetation was beginning to desiccate in the first decade of February.

Locusts

MOROCCO

Swarms and hopper infestations continued to be reported in the Tata and Guelmim areas during January and early February. The total area treated during the campaign up to 24 February including Western Sahara, was 285,277 ha, of which 86,148 ha were hoppers. The areas treated during January and up to 24 February were 6,571 ha of adults and 76,119 ha of hoppers.

From 17 February there were increasing numbers of reports of swarms from Mseid (2801N/1049W) and Bouirat. Most were reported displacing to the north or west and by the end of February some swarms had reached the Guelmim and Akka areas.

WESTERN SAHARA

Breeding continued throughout January and February, mainly in the Dakhla, Laayoune, Smara and Mahbes areas. By 26 January 50,800 ha of first to third instar hoppers had been treated. From 17 February there were reports of swarms in the Smara, Farsia and Mahbes areas, mainly flying north or west.

ALGERIA

Hopper infestations were being controlled by ground teams in the Tindouf area. Up to 30 January 380 ha had been treated. By late February some 25,000 ha had been treated.

New generation adults were seen in the oasis of Tindouf from 15 February. There were two reports of swarms of mixed maturity in the Tindouf area on 25 February; one was diffuse flying north-east over Tindouf, the other was 25 sq. km, dense and settled 12 km east of Tindouf and was treated on 26 February.

Mature adults were seen in small patches of vegetation in the Bouda (2805N/0034W) and Ouaina at densities of 1-2 per square metre over 25 hectares in mid-February. Mature adults were also seen at 3130N, 0025W and in numerous wadis between Bechar and Tindouf generally at densities of 2-3 per hectare. Adult populations were also reported at 2945N, 0410W and at Oum El Assel (2842N/0637W) in late February.

There were no reports from TUNISIA or LIBYA.

EASTERN AFRICA

Meteorology

Meteosat imagery indicated that there was some rain over southern Eritrea and Djibouti in mid-February. There was no significant rainfall over the Sudan and northern Ethiopia Red Sea coastal plains or over the coastal plains of northern Somalia.

Breeding conditions

Conditions were very favourable for breeding in the sub-coastal areas of Wadi Di-ib and Wadi Oko.

Locusts

SUDAN

In early January a medium density mature swarm was found copulating and laying over an area of 300 ha in Wadi Di-ib (2140N/3609E). Thin density groups of fourth and fifth instar hoppers and fledglings were seen in Garaa Aweb (2132N/3605E); scattered fifth instar hoppers and fledglings at medium densities were seen in Khor Hepkok (2126N/3609E) and scattered immature adults were seen over 300 ha in Khor Mafdib (2120N/3604E). In Wadi Iko scattered late instar hoppers and immature adults were present over an area of 6,550 hectares. Limited ground control operations were undertaken. On 6-7 February a ground survey of Wadis Di-ib and Oko revealed copulating adults and fledglings at densities of 900-1,200 per hectare. 700 hectares were treated with 310 l of Diazinon EC and Fenitrothion ULV. On a further survey on 11 February 3,000 hectares of copulating and laying groups of adults at densities of 6,000-11,000 per hectare and small fourth-fifth instar bands were found. Some sorghum was damaged. Ground control was in progress.

In the Tokar delta mature adults were seen at densities of 240-1,200 per hectare at the end of January.

Inland, scattered adults were seen at densities of 180-240 per hectare at K-Gub (1859N/3618E) and 180 hectares of adults were baited in the Musmat area.

No locusts were reported from elsewhere in the Region.

NEAR EAST

Meteorology

Northern parts of the Arabian peninsula were influenced by successive mid-latitude depressions which gave rise to heavy rainfall. Rain associated with the Sudan depression fell over the Hijaz, Asir and the Saudi Arabian Tihama. Heavy rain was reported from the Tihama of the Yemen Arab Republic.

Breeding conditions

Conditions were favourable for breeding on the Qunfidah and Jizan Tihamas and on the Yemen Tihama.

Locusts

No locusts were reported from the Region.

SOUTH-WEST ASIA

Meteorology

Light to medium rain was reported from Nushki, Kharan, Pasni and Turbat on 1 January and light rain was reported from Panjgur, Pasni and Turbat on 11 January. Further light rain was reported from Pasni and Turbat on 19 January and light to medium was recorded at Uthal, Pasni, Turbat, Panjgur and Kharan on 27 January.

Breeding conditions

Conditions for breeding will generally have been unfavourable.

Locusts

No locusts were reported from the Region during January. PAKISTAN and INDIA were clear in the first half of February.

FORECAST FOR MARCH-APRIL 1988

Considerable numbers of swarms are likely to invade southern and south-eastern Morocco and north-west Algeria from the south. Further breeding will continue in northern Mauritania and adjacent areas.

In <u>West Africa</u> widespread breeding will continue in northern Mauritania and considerable numbers of swarms are likely to be produced in the latter part of the forecast period. Considerable numbers of adults will persist in the Adrar des Iforas and Timetrine in north-east Mali and in north-west Niger.

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In <u>North-West Africa</u> considerable numbers of swarms will reach southern and south-eastern Morocco and north-western Algeria during March and, unless controlled, they may do considerable damage to crops and they are likely to breed, giving rise to widespread hopper infestations. Some may even reach Tunisia.

In <u>Eastern Africa</u> breeding will continue north and north-west of Port Sudan but control should prevent significant escapes.

In the $\underline{\text{Near East}}$ small scale breeding may occur on the Saudi Arabian Tihama.

In <u>South-West Asia</u> small scale breeding may occur in Baluchistan of Pakistan.

Rome 1 March 1988.

