

FAO DESERT LOCUST BULLETIN No. 145

GENERAL SITUATION DURING SEPTEMBER 1990 FORECAST UNTIL MID NOVEMBER 1990

The Desert Locust situation continues to be calm with the only significant populations being reported from the Indo-Pakistan summer monsoon breeding area. During the first half of September, several hopper groups were present in the Tharparkar desert of Pakistan and hoppers and concentrations of adults, at densities up to 6,000 per sq. km., were reported in adjacent areas of Rajasthan in India. Although control operations are in progress in these areas, it is possible that a few small swarms and adult groups will form and move toward the Mekran of Pakistan, south-eastern Iran, and perhaps reaching as far as Oman, Fujairah of UAE, and Mahra of Yemen during the forecast period.

METEOSAT and ARTEMIS satellite imagery indicated that rainfall decreased during the month in most Sahelian areas except north of Magta Lahjar in Mauritania and near Tombouctou and Gossi in Mali. Isolated hoppers and mature adults were present at several locations of southern and central Mauritania and in Air of Niger. Isolated adults were also reported from Gourma of Mali and Tamesna of Niger and are likely to be present in some areas of Adrar des Iforas and Tamesna of Mali. During the forecast period, adults are likely to persist and breed on a small scale in these areas and also as far north as Tiris-Zemmour in northern Mauritania. No locusts were seen in Chad during surveys in September; however, a few isolated adults may be present in central and northern areas.

In Sudan, a few isolated adults were present in Gezira in late August. METEOSAT and ARTEMIS satellite imagery suggest that the first rains of the season may have begun in the Eastern region near Kassala and on the southern Red Sea coast during September where a few scattered adults may be present.

Scattered adults are likely to be present and breeding on the southern Tihama of Saudi Arabia from Lith to the Yemen border where moderate to heavy rain fell in mid-September and further south on the Yemen Tihama. There is a low probability of a few isolated adults in northern coastal areas of Djibouti and Somalia.

The Bracknell model and METEOSAT and ARTEMIS satellite imagery indicate that seasonal rains have commenced in North-West Africa, primarily on the west coast of Morocco and in the Atlas Mountains. It is likely that scattered adults will occur in Oued Draa and the extreme south-west of Morocco and in some low-lying areas around the Tademait Plateau and Adrar N'Ahnet of central Algeria during the forecast period.



WEATHER AND ECOLOGICAL CONDITIONS

Seasonal rainfall in northern and central Sahelian areas of West Africa decreased during September as a result of the ITCZ moving southward to nearly 15°N.

In central and southern Mauritania, METEOSAT imagery indicated isolated thunderstorm activity on the 1st and widespread light to heavy rains on the 4th and 8th and throughout the second decade as a result of western-moving frontal systems. During the first two decades, Aleg received 148 mm, Tintane 82 mm, Kiffa 54 mm, Magta Lahjar 42 mm, Nema 32 mm, Nouakchott 18 mm, and Akjoujt 15 mm. Similar rainfall is expected to have fallen in central Mali. By the end of the second decade of September, vegetation was reported dry in Mauritania north of 17°N except for a few patches in Tiris Zemmour and in Adrar near Atar.

During the first decade of September, no significant rainfall was reported from Adrar des Iforas and Tamesna of Mali and Tamesna and Air of Niger; only light rain fell in Chad at Abeche and Biltine. However, the Bracknell model and METEOSAT and ARTEMIS imagery indicated that light to moderate rainfall may have occurred during the month primarily in Ouaddai region of Chad.

Seasonal rainfall in western, central, and northern Sudan is below average as of the end of August and ecological conditions were generally dry except for in a few areas in the White Nile and Gezira provinces. In September, METEOSAT and ARTEMIS imagery indicated that substantial clouds were present over western and central Sudan and the Bracknell model suggested that light to moderate rain may have occurred. Furthermore, the first rains of the season have probably begun in the Eastern region near Kassala and in the mountains inland from the southern Red Sea coast.

The Red Sea coast of Ethiopia and northern coastal areas of Somalia were reported to be dry and not favourable for breeding during the second half of August. However, METEOSAT and ARTEMIS imagery suggest that rain may have fallen on the southern Red Sea coast and northern highlands of Ethiopia during the first two decades of September.

Moderate to heavy rainfall was reported on the Saudi Arabian Tihama south of Qunfidah to the Yemen border in mid-September and is likely to have fallen on the Tihama of Yemen as well. METEOSAT and ARTEMIS satellite imagery indicated substantial clouds present further north over the Tihama, up to Jeddah, by late September. Consequently, ecological conditions were reported to have improved in these areas.

Light to moderate rainfall occurred in Chhor, Khuzdar, Karachi, and Bahawalpur areas of Pakistan from 1-3 September.

The Bracknell model and METEOSAT and ARTEMIS imagery indicate that seasonal rains have started in North-West Africa, primarily on the west coast of Morocco and in the Atlas Mountains.



AREA TREATED IN SEPTEMBER 1990

| | |
|---------------------------|-----------------------------|
| India (1-15 September) | 48 ha |
| Pakistan (15-31 August) | within an area of 11,600 ha |
| Pakistan (1-15 September) | within an area of 4,700 ha |
| Saudi Arabia (August) | area details not available |



WEST AFRICA

MAURITANIA

A late report was received indicating that isolated adults were present in Adrar 236 km north-east of Atar at Igavane and 135 km south-west at Madene on 20 August.

During the first two decades of September, isolated hoppers and mature adults were seen at several locations in Tagant west of Tidjikja, Brakna near Magta Lahjar, Hodh El Gharbi north of Aioun El Atrouss, and Hodh El Charki north-east of Nema. Isolated adults were also present in Assaba near Kiffa, Trarza east of Nouakchott, and Adrar near Choum at Oued Chough (2120N/1258W).

MALI

No locust surveys were carried out during the third decade of August. In September, isolated adults were reported in Gourma from Tinsidjni (1610N/0144W) on the 7th, Daka N'Bara (1600N/0247W) on the 10th, and Tassaouat (1522N/0214W) on the 17th. Adults, at a density of 10-20 per ha, were present on 5 ha of millet at Tassakou (155N/0259W).

NIGER

Late reports were received stating that scattered adults were laying in western Air at Wadi Aourour (1952N/0800E) and Wadi Eroug (1906N/0752E) at a density of about 25 per ha on 15 August. Isolated locusts were reported in Tamesna at Alalaka (1814N/0538E) on the 30th.

Isolated adults were detected during surveys in the first decade of September in Tamesna at In-Allaghene (1811N/0612E), Agassanar (1716N/0632E), and Benena (1652N/0632E) and in Air at Aourhar (1928N/0750E).

CHAD

No locusts were seen during surveys undertaken in Lac, Kanem, Guera, Ouaddai, and Biltine regions during the last decade of August and first half of September.

No locust information had been received from other countries in the region up to 30 September.

NORTH-WEST AFRICA

MOROCCO

A late report indicated that no locusts were seen during surveys undertaken in the south and south-east during July and August with the exception of a few scattered adults near the Algerian border in the Bouarfa area (3232N/0157W) on 25 July.

No locust information had been received from countries in the region up to 30 September.

EASTERN AFRICA

SUDAN

A late report was received reporting isolated adults at a density of 1 per sq. km. in Gezira at Managil (1415N/3300E), Kwa (1345N/3230E), and El Geteina (1452N/3222E) on 20 August. No locusts were found during surveys undertaken in Northern Darfur, Southern

Kordofan, Northern, and White Nile provinces during the second half of August. No reports were received for September.

DJIBOUTI, ETHIOPIA, KENYA, SOMALIA, TANZANIA, and UGANDA

The locust situation was reported calm up to 30 August.

NEAR EAST

KINGDOM OF SAUDI ARABIA

A late report was received indicating that locusts were present on the southern Tihama during August where aerial and ground control operations were undertaken. No further details were provided.

No locust information had been received from other countries in the region up to 30 September.

SOUTH-WEST ASIA

PAKISTAN

During the second half of August, small hopper bands were found at 8 localities within an area of 492 sq. km. in the Chachro and Mithi areas of Tharparkar desert. Control operations were undertaken within an area of 116 sq. km. Scattered adults were present in Nara and Cholistan deserts and Lasbela with a maximum density of 3,000 per sq. km. reported at Damramro (2520N/7015E) in Tharparkar on the 23rd.

During the first half of September, several small hopper groups were present in patches within an area of 47 sq. km. in Khipro and Tharparkar deserts. Control operations were in progress. Solitary adults at densities of 150-1,250 per sq. km. were reported at several locations in the monsoon summer breeding area.

INDIA

During the second half of August, scattered adults were reported from 27 localities in Bikaner, Jodhpur, Jaisalmer, and Ganganagar districts of Rajasthan. A maximum density of 225 adults per sq. km. was seen at Phulsar (2628N/7156E) in Jodhpur district on the 21st. Low density hoppers were present at 11 locations of Bikaner district.

During the first half of September, breeding was reported in Karda (2623N/7015E) and Harnau-Kadehr (2621N/7015E) areas of Jaisalmer district. Control operations were undertaken against hoppers over 48 ha. Scattered adults were also reported from 92 localities in Bikaner, Jaisalmer, Jodhpur, and Barmer districts with a maximum density of 6,000 per sq. km. at Karda.

AFGHANISTAN

A late report was received stating that no locusts were present from January to the end of July.

No locust information had been received from other countries in the region up to 30 September.

NEW ASSISTANCE REQUESTED

An urgent request has been received from **SENEGAL** for ULV pesticide to control approximately 100,000 ha of grasshopper infestations

NEW ASSISTANCE PLEDGED

No information regarding assistance against Desert Locusts had been received up to 30 September.



FORECAST UNTIL MID NOVEMBER 1990

WEST AFRICA

MAURITANIA

Scattered adults are likely to occur in Trarza, Tagant, Inchiri, Adrar, Dakhlet Nouadhibou, and as far north as Tiris-Zemmour and breed in areas of recent rainfall during the forecast period. A few isolated populations may persist in the two Hodhs.

MALI

Scattered adults are almost certainly present in Tamesna and the Adrar des Iforas. These will persist and breed on a small scale during the forecast period.

NIGER

Scattered adults will persist and breed on a small scale in areas of green vegetation in Tamesna and Air during the forecast period.

CHAD

A few isolated adults may be present in some areas of BET, Kanem, Batha, Biltine, and Ouaddai.

BURKINA FASO, CAMEROON, GAMBIA, GUINEA BISSAU, GUINEA CONAKRY, and SENEGAL

No significant developments are likely and no invasions are expected.

NORTH-WEST AFRICA

MOROCCO

Scattered adults may be present in Oued Draa and in the extreme south-western Sahara in Adrar Soutouf and inland from Dakhla and Layoune.

ALGERIA

Scattered adults may be present in wadis and other run-off areas around the Tademait Plateau and Adrar N'Ahnet.

TUNISIA and LIBYA

No significant developments are likely and no invasions are expected.

EASTERN AFRICA

SUDAN

Scattered adults may be present near Kassala and on the Red Sea coastal plains and breed in wadis and other areas that receive run-off from recent rains.

ETHIOPIA

A few isolated adults may be present in northern Eritrea and breed in wadis and other areas that receive run-off from recent rains.

DJIBOUTI

There is a low probability of a few isolated adults in northern coastal areas.

SOMALIA

There is a low probability of a few isolated adults on the northern coast.

KENYA, TANZANIA, and UGANDA

No significant developments are likely and no invasions are expected.

NEAR EAST**KINGDOM OF SAUDI ARABIA**

Scattered adults are likely to be present on the Tihama from Lith to the Yemen border and breed in wadis and other areas that receive run-off from recent rains.

YEMEN

Scattered adults are likely to be present on the Tihama and breed in wadis and other areas that received run-off from recent rains. They may also be present and breed on the coastal plains west of Aden, near Shabwah, and in Wadi Hadhramaut. A few scattered adults may occur in Mahra as populations begin to move out of the Indo-Pakistan summer monsoon breeding areas during the forecast period.

OMAN

Scattered adults may occur on the Batinah coast and the Musandam Peninsula as populations begin to move out of the Indo-Pakistan summer monsoon breeding areas during the forecast period.

UAE

Scattered adults may occur in Fujairah as populations begin to move out of the Indo-Pakistan summer monsoon breeding areas during the forecast period.

BAHRAIN, EGYPT, IRAQ, ISRAEL, JORDAN, KUWAIT, LEBANON, QATAR, SYRIA, and TURKEY

No significant developments are likely and no invasions are expected.

SOUTH-WEST ASIA**PAKISTAN**

A few small swarms may form during the forecast period in Tharparkar desert and move west to the Mekran. Consequently, numbers will decrease in the summer monsoon breeding areas; only scattered adults are likely to remain.

INDIA

A few small swarms may form during the forecast period in Jaisalmer and Barmer districts of Rajasthan. Populations will decrease in the summer monsoon breeding area as adults move toward the west; only scattered adults are likely to remain.

IRAN

Considerable numbers of adults may occur in the south-east as populations begin to move out of the Indo-Pakistan summer monsoon breeding areas during the forecast period.

AFGHANISTAN

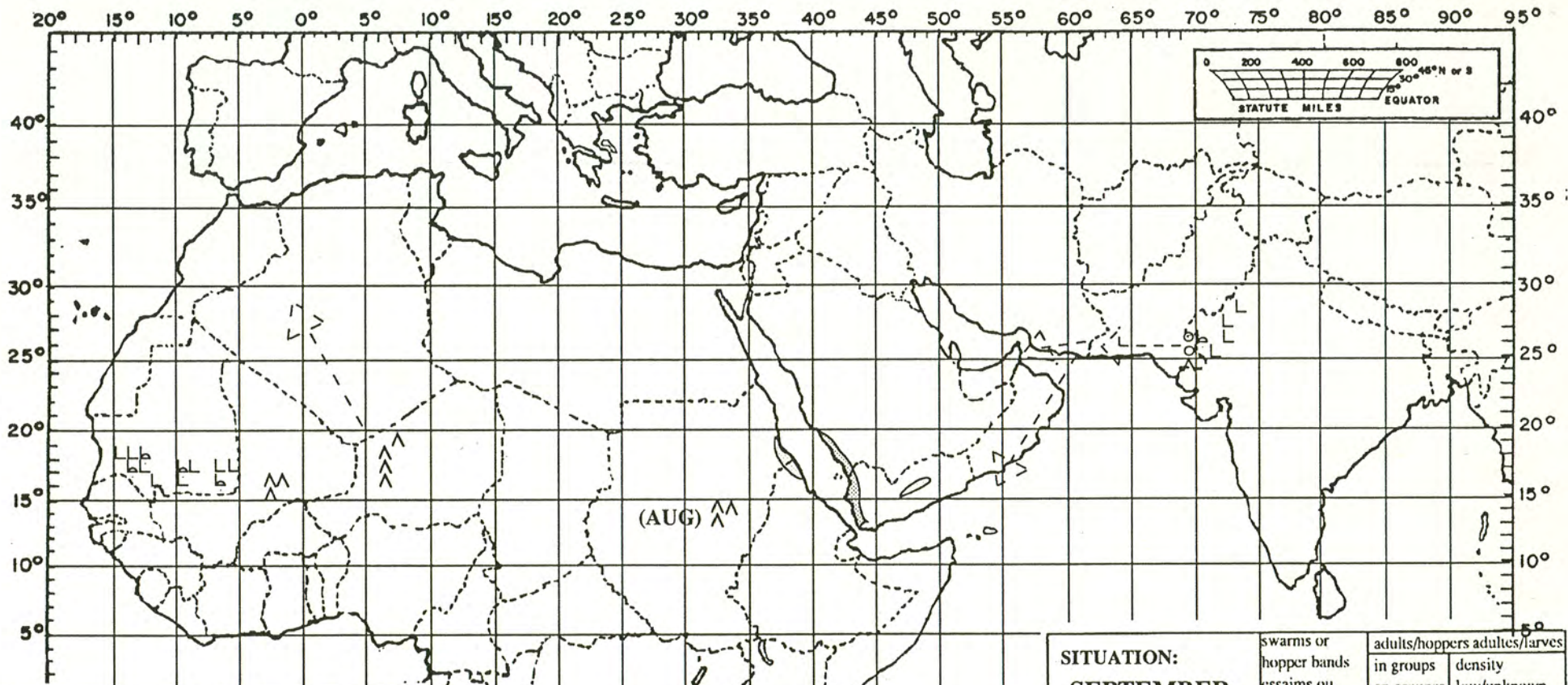
No significant developments are likely and no invasions are expected.

1 October 1990



Desert Locust: summary Criquet Pèlerin: situation résumée

No. 145



| | | |
|---|----------------------|----------------------|
| FORECAST TO: PREVISION AU: 15.11.90 | LIKELY / PROBABLE | POSSIBLE POSSIBLE |
| current undetected breeding / reproduction en cours non détectées | | |
| major swarm(s) / essaim(s) importantant(s) | | |
| minor swarm(s) / essaim(s) limité(s) | | |
| non swarm / aîlés non essaimant | | |

**SITUATION:
SEPTEMBER
1990**

| | swarms or hopper bands essaims ou bandes larvaires | adults/hoppers en groupes | density low/unknown densité faible/inconnue |
|---|---|------------------------------|--|
| immature adults aîlés immatures | ■ | □ | ◻ |
| mature or partly mature adults aîlés matures ou partiellement matures | ▲ | ◻ | ◻ |
| adults, maturity unknown aîlés, maturité inconnue | ▲ | △ | △ |
| egg laying or eggs pontes ou œufs | ▼ | ▽ | ▽ |
| hoppers larves | ● | ○ | ◐ |
| hoppers & adults (combined symbol example) larves & adultes (exemple de symbole combiné) | ◼ | ◼ | ◼ |