



FAO



EMERGENCY CENTRE FOR LOCUST OPERATIONS

DESERT LOCUST BULLETIN No. 201



GENERAL SITUATION DURING MAY 1995 FORECAST UNTIL MID-JULY 1995

Very little information on Desert Locust was received during May. Small to moderate scale infestations of hopper bands were reported from many parts of Algeria and from the southern Nile Valley of Egypt. Control operations were in progress in all of these areas. Additional infestations may be present in Morocco and Saudi Arabia. Any escapees from these areas will move towards the summer breeding areas of West Africa and Sudan, respectively, and lay with the onset of the seasonal rains. The scale of the movement towards the summer breeding areas and the subsequent laying depends on the success of current control operations and the quantity and timeliness of the summer rains. Surveys should immediately start in the summer breeding areas to monitor the situation as it develops.

No significant rainfall was reported from the spring breeding areas of North-West Africa and South-West Asia. Consequently, conditions were reported to be drying up.

In North-West Africa, control operations continued primarily against maturing hopper bands in western, central and eastern Algeria, treating nearly 14,000 ha. No major infestations nor rains were reported from West Africa, although small scale swarm control was undertaken in northern Niger in late April.

More than 8,000 ha of hopper bands were reported and treated in the southern Nile Valley of Egypt.

The locust situation in the Arabian Peninsula remains unclear since no reports were received during May. Therefore, the possibility of locusts moving towards the summer breeding areas of Eastern Africa and South-West Asia cannot be discounted at this point in time but such a movement, if any, is expected to be on a small scale.

The FAO Desert Locust Bulletin is issued monthly, supplemented by Updates during periods of increased Desert Locust activity, and is distributed by fax, e-mail, FAO pouch and airmail by the Emergency Centre for Locust Operations, AGP Division, FAO, 00100 Rome, Italy.

Telephone: (39-6) 522-52420 or -54578 (7 days/week, 24 hr)

E-Mail: Abderrahmane.Hafraoui@fao.org (via Internet)

Internet: gopher://gopher.fao.org

Facsimile: (39-6) 522-55271

Telex: 610181 FAO I



WEATHER & ECOLOGICAL CONDITIONS DURING MAY 1995

Based on field reports, METEOSAT and ARTEMIS satellite imagery, and Météo-France synoptic and rain data. Rainfall terms: light = less than 20 mm of rain; moderate = 20 - 50 mm; heavy = more than 50 mm.

Little rain occurred during the month in the spring breeding areas from North-West Africa to South-West Asia. As a result, ecological conditions were reported to be drying up in most places. In the summer breeding areas of the Sahel of West Africa and Sudan, the ITCZ was located around 15°N although at times it reached as far north as 20°N. Despite the presence of some depressions and cloud activity, no significant rainfall was reported and conditions continued to remain unfavourable for breeding.

In North-West Africa, ecological conditions were reported to be drying in Algeria due to high temperatures. No significant rains were reported from Morocco, southern Tunisia and southern Libya. In West Africa, winds from the north predominated during the second half of the month in Mauritania which could have favoured locust movements from the north. In Tamesna of Mali and Niger, conditions may have improved in a few places as a result of light rains which fell from late April onwards. However, there was no clear evidence that the rainy season has started in any of these regions.

In Egypt, green vegetation persisted in several wadis of the Red Sea Hills and in adjacent areas of the southern Nile Valley. Moderate rains fell in Geneina of Northern Darfur in Sudan and light to moderate rains may have also occurred in Kassala and El Obeid. As a result, ecological conditions are likely to improve in parts of the summer breeding areas. Light to moderate rains continued to fall throughout the month over the Railway area of Ethiopia, where ecological conditions are expected to be favourable for breeding. Clouds were often present along the coastal plains on both sides of the Red Sea Trench and Gulf of Aden, but there were very little rains reported.

No significant rainfall was reported from the Arabian Peninsula except for 21 mm in Wadi Dawasir in south-western Saudi Arabia and rainfall may have occurred in the UAE near Buraimi.

No significant rains were reported from South-West Asia and ecological conditions were dry or becoming dry in the spring breeding areas of the coast and interior of Baluchistan. The predominant winds over the Indian Ocean became south-westerly by mid-month, indicating the approach of the summer monsoon.



AREA TREATED

Algeria	13,942 ha	(1-20 May)
Egypt	8,100 ha	(15 April - 5 May)
Niger	600 ha	(21 April)
Sudan	169 ha	(7-30 April)



DESERT LOCUST SITUATION

Please see the last section of this Bulletin for a definition of terms used in reporting the current locust situation.

WEST AFRICA

NIGER

Small residual populations of solitary and transient maturing adults were present near In Abangharit (1754N/0602E) during the second half of April. Small swarms totalling 600 ha were treated by air on the 21st south of Arlit at Akokan (1835N/0745E). Other infestations were reported west of Agadez but could not be confirmed.

SENEGAL

An unconfirmed report was received, stating that solitarious adults were seen in the Senegal River Valley at Matam (1639N/1458W) and Podor (1539N/1316W). Further details are awaited.

No locust information has been received from other countries in the region up to 31 May.

NORTH-WEST AFRICA

ALGERIA

A total of 60 locations reported locust infestations during the first decade of May and 71 during the second. Most of these were concentrated near the Moroccan border (Tindouf and Bechar areas), in the north and north-west of the central Sahara (Adrar, In Salah and El Golea), and to a lesser extent in the south (west of Tamanrasset) and near the Libyan border (Djanet area). The majority of the infestations consisted of hopper bands mixed with immature adults and a few mature adults at densities up to 90 adults per sq. m. The size of the infested areas varied from 2-1,200 ha, although most were less than 200 ha. Additional laying and hatching occurred during the period and hopper bands continued to form and mature. By mid-May, many of the hoppers had fledged into immature adults. Control operations treated 109 locations for a total of 13,942 ha.

No locust information has been received from other countries in the region up to 31 May.

EASTERN AFRICA

SUDAN

In late April, immature gregarious adults persisted at a few places along Wadi Diib (2132N/3606E) in the interior adjacent to the northern Red Sea coast. The total infested area was about 1,000 ha with densities of up to 500 adults per ha. A total of 270 ha were treated during April. No locusts were seen during surveys on the southern coastal plains at the end of April.

SOMALIA

Hopper bands were seen at two locations near the Ethiopian border in the extreme north-west during an aerial survey on 20 May. The total infested area was estimated to be about 320 ha. However it was unclear if these were Desert Locust; they could have been African Migratory Locust.

No locust information has been received from other countries in the region up to 31 May.

NEAR EAST

EGYPT

From mid April to early May, ground control operations were undertaken against medium to dense late instar hopper bands at several places near Lake Nasser. Although the bands were reported to be very small (less than one ha), they were extremely numerous with up to 320 bands seen at a single site. An immature swarm was reported further east in the Red Sea Hills on 1,500 ha near Wadi Allaqi (2223N/

3348E) on 3 May. A total of 8,100 ha was treated during the period.

YEMEN

No locusts were seen during surveys undertaken in early May along the Tihama, the coastal plains of Aden and in the adjacent interior areas.

No locust information has been received from other countries in the region up to 31 May.

SOUTH-WEST ASIA

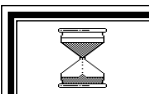
PAKISTAN

During the second half of April, up to 50 adults were reported from a total of 35 places along the coast of Baluchistan from Gwadar to Pasni and in Lasbela, in the adjacent interior areas of Turbat and Panjgur and further north in Nushki and Khuzdar. Small scale breeding occurred along the coast in two places near Gwadar where first instar hoppers were seen on 16 April.

During the first half of May, up to 60 adults were reported from a total of 24 places in the above mentioned areas of Baluchistan. Some of the adults were mature and laid on the coast near Gwadar and in the interior near Kharan where first to third instar hoppers were seen at five places. Breeding is also expected to have occurred near Nushki.

INDIA

No locust activity was reported during the second half of April.



FORECAST UNTIL MID-JULY 1995

Forecasting terms used in this section to indicate the chances of a particular event happening are indicated below; every term is arranged within each category from most to least probable:

high probability	will, probably, almost certain, likely, expected
medium probability	may, might
low probability	possibly, perhaps, unlikely

WEST AFRICA

MAURITANIA

Seasonal migfrom the north has probably already begun and will continue during June. This migration is expected to consist of adult groups and a few small swarms and is likely to be augmented by any escapees from control operations in Morocco and Algeria. Adults are most likely to appear in the Tagant, Brakna and two Hodhs and they will lay with the onset of the rains. Regular surveys should commence immediately in these regions.

MALI

Although the situation remains unclear, some adults are likely to present and persisting at places in the Tilemsi and Timetrine Valleys. These are expected to be supplemented by any adults groups and perhaps a few small swarms that escape control operations in Algeria. Breeding will commence with the onset of the rains.

NIGER

Adults, possibly a few small swarms, will persist in the Tamesna and are expected to be supplemented by any adults groups and perhaps a few small swarms that escape control operations in Algeria. Although the majority of breeding will commence with the onset of the seasonal rains, early laying may have already occurred in a few areas where rains fell in April.

CHAD

Scattered adults are likely to gradually appear in BET, Kanem, Batha and Biltine areas and breed on a small scale if rainfall occurs.

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

No significant developments are likely.

NORTH-WEST AFRICA

ALGERIA

As conditions continue to dry out, additional breeding is not likely to occur, except perhaps in a few irrigated cropping areas. Hopper numbers are expected to decline as a result of control operations and fledging. New generation adults will continue to appear and may form swarms which will almost certainly migrate southwards. By the end of the forecast period, the overall situation in the country should improve.

MOROCCO

Although the situation is unclear, hopper and adult infestations are probably present south of the Atlas Mountains near the Algerian border. However, the overall infestation is expected to continue to decline during the forecast period as a result of drying conditions and adult migration south towards the summer breeding areas of the Sahel.

LIBYA

Some adults may be present in the south-west, but these are expected to move towards the summer breeding areas of the Sahel during the forecast period.

TUNISIA

No significant developments are likely.

EASTERN AFRICA

SUDAN

Infestations will decline in Wadi Diib as adults move towards the summer breeding areas. Additional adult groups and a few swarms are expected to appear in Northern Kordofan, Northern Darfur and to a lesser extent in the Northern Province from any adults escaping control in Egypt and Saudi Arabia. These will commence to breed with the onset of the rains. Surveys should commence in the summer breeding areas.

ERITREA

Isolated adults, if present, will decline in coastal areas as conditions become dry and adults move towards the west.

SOMALIA

Isolated adults are likely to be present and persist in the north-western coastal areas. Some of these may move further eastwards along the northern coastal plains.

ETHIOPIA

Isolated adults may be present in the Railway area.

DJIBOUTI, KENYA, UGANDA and TANZANIA

No significant developments are likely.

NEAR EAST

EGYPT

Any escapees from control operations in the southern region are likely to form groups and a few small swarms which will move south towards the summer breeding areas of Sudan. There is a low probability that a few may persist in irrigated areas and breed. There may be scattered adults present on the Red Sea coast; however, these are expected to move towards the interior of Sudan.

SAUDI ARABIA

The situation remains unclear. Scattered adults are likely to be present on the Tihama and may persist. Infestations may be present in a few places of the central interior and further south near the Empty Quarter as a result of earlier undetected breeding. However, further breeding is not likely in these areas.

YEMEN

There is a low possibility of a few adults appearing in the interior areas from the north early in the forecast period.

OMAN

Scattered adults are likely to be present on the Batinah and in Dhofar where breeding may have occurred in areas that received substantial rains during the past few months. A few adults may appear from the west early in the forecast period. Surveys are recommended in these areas to check the situation.

UAE

Scattered adults may be present and breeding in areas of recent rains, primarily near Buraimi. A few adults may appear from the west early in the forecast period. Surveys are recommended to check the situation.

QATAR and BAHRAIN

A few isolated adults may be present.

IRAQ, ISRAEL, JORDAN, KUWAIT, LEBANON, SYRIA and TURKEY

No significant developments are likely.

SOUTH-WEST ASIA

PAKISTAN

Current infestations in Baluchistan will decline as conditions become dry and adults move eastwards. Low numbers of adults are expected to appear in the summer breeding areas from Tharparkar to Cholistan and lay with the onset of the monsoon rains. These may be augmented by any locusts arriving from the Arabian Peninsula.

INDIA

As a result of any movement from the west, adult numbers will increase in Rajasthan where small scale breeding is expected to commence during the forecast period with the onset of the monsoon rains.

AFGHANISTAN and IRAN

No significant developments are likely.



GLOSSARY OF TERMS

The following special terms are used in the Desert Locust Bulletin when reporting locusts:

Non-gregarious adults and hoppers

isolated	very few present and no mutual reaction occurring; 0 - 1 adult per 400 m foot transect (or less than 25 per ha). Other terms: a few.
scattered	enough present for mutual reaction to be possible but no ground or basking groups seen; 1 - 20 adults per 400 m foot transect (or 25 - 500 per ha). other terms: some, low numbers.
group	forming ground or basking groups; more than 20 adults per 400 m foot transect (or more than 500 per ha).

Adult swarm and hopper band sizes

very small	swarm: less than 1 sq. km	band: 1 - 25 sq. m.
small	swarm: 1 - 10 sq. km	band: 25 - 2,500 sq. m.
medium	swarm: 10 - 100 sq. km	band: 2,500 sq. m - 10 ha
large	swarm: 100 - 500 sq. km	band: 10 - 50 ha
very large	swarm: more than 500 sq. km	band: more than 50 ha

Other reporting terms

breeding	the process of reproduction from copulation to fledging.
summer	rains and breeding: July - September/October
winter	rains and breeding: October - January/February
spring	rains and breeding: February - June/July
decline	a period characterised by breeding failure and/or successful control leading to the dissociation of swarming populations and the onset of recessions; can be regional or major.
outbreak	a marked increase in locust numbers due to concentration, multiplication and gregarisation which, unless checked, can lead to the formation of hopper bands and swarms.
plague	a period of one or more years of widespread and heavy infestations, the majority of which occur as bands or swarms. A major plague exists when two or more regions are affected simultaneously.
recession	period without widespread and heavy infestations by swarms.
remission	period of deep recession marked by the complete absence of gregarious populations.
upsurge	a period following a recession marked initially by a very large increase in locust numbers and contemporaneous outbreaks followed by the production of two or more successive seasons of transient-to-gregarious breeding in complimentary seasonal breeding areas in the same or neighbouring Desert Locust regions.

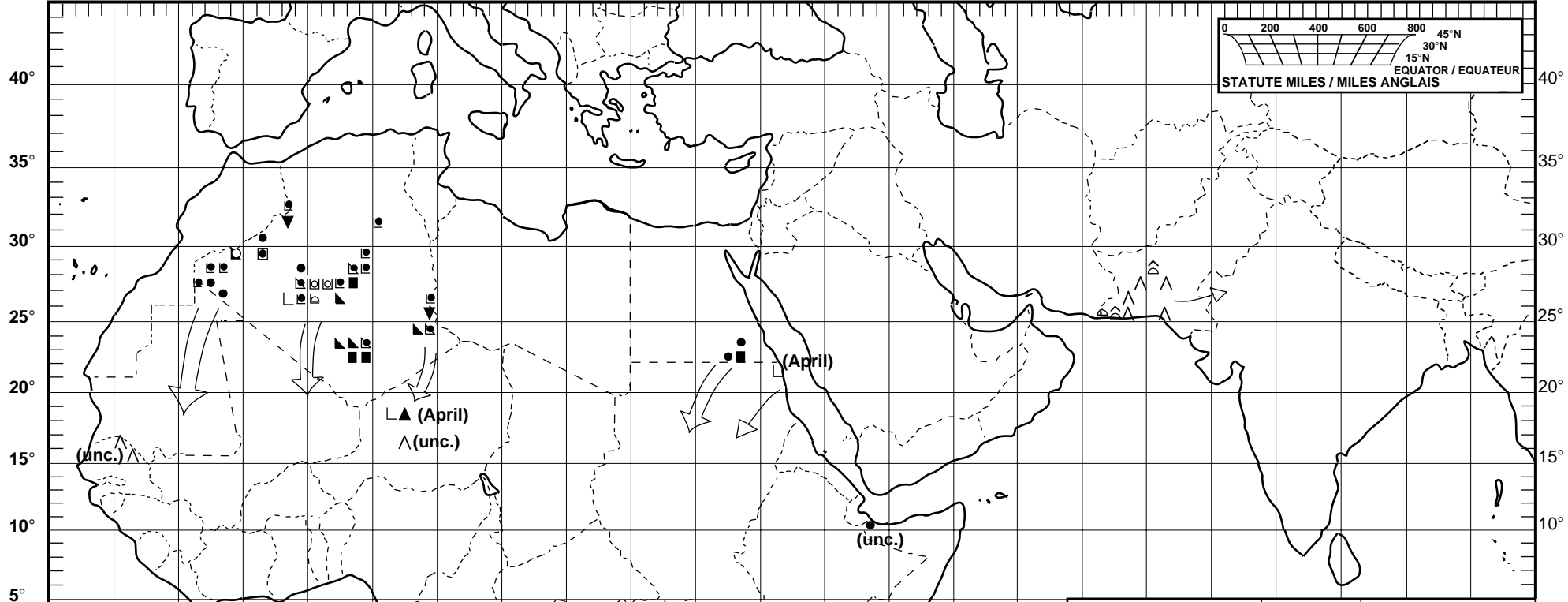
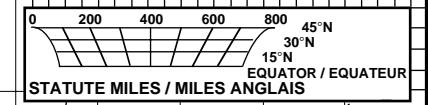


Desert Locust: summary Criquet pèlerin: situation résumée

No. 201



20° 15° 10° 5° 0° 5° 10° 15° 20° 25° 30° 35° 40° 45° 50° 55° 60° 65° 70° 75° 80° 85° 90° 95°



FORECAST TO: PREVISION AU: 15.7.95	LIKELY PROBABLE	POSSIBLE POSSIBLE
current undetected breeding reproduction en cours et non détectée		
major swarm(s) essaim(s) important(s)		
minor swarm(s) essaim(s) limité(s)		
non swarming adults adultes non essaimant		

SITUATION: May 1995 mai 1995	swarms or hopper bands essaims ou bandes larvaires	adults/hoppers adultes/larves	
		in groups en groupes	density low/unknown densité faible/inconnue

immature adults adultes immatures			
mature or partly mature adults adultes matures ou partiellement matures			
adults, maturity unknown adultes, maturité inconnue			
egg laying or eggs pontes ou œufs			
hoppers larves			
hoppers & adults (combined symbol example) larves et adultes (exemple symboles combinés)			

15° 20° 25° 30° 35° 40° 45°