

# DESERT LOCUST BULLETIN

FAO Emergency Centre for Locust Operations



No. 294

(1st April 2003)



## General Situation during March 2003 Forecast until mid-May 2003

The Desert Locust situation remained calm during March. Small-scale breeding occurred in Western Hoggar, in Algeria. A few solitary adults and hoppers were reported from one location in western Mauritania. There were again unconfirmed reports of adult and hopper populations in northern Mali. Only scattered adults were reported from Sudan and Egypt. There was an unconfirmed report of adults close to Aden, in Yemen. In South-West Asia, only isolated adults were seen in Pakistan where the ecological conditions were locally improving. No significant developments are likely during the forecast period.

**Western Region.** Very little rain fell in the region during March. Consequently, dry conditions prevailed except in a few parts of southeastern Morocco and of southeastern Algeria where small-scale breeding occurred and some control operations were carried out. A few adults and hoppers were present at one location close to Akjoujt, Mauritania where the conditions are reported as generally unsuitable for breeding and survival except in some restricted areas. Elsewhere, no locusts were reported although there were again unconfirmed sightings of locust adults and hoppers in northern Mali.

**Central Region.** As a result of small-scale breeding which occurred in February near the Red Sea coast in northeastern Sudan, edglings and mature adults were present in a few wadis. Scattered isolated adults were reported from a farm in southeastern Egypt. There was an unconfirmed report of solitary mature adults in Lahij, Yemen. Elsewhere, no locusts were reported in the region. However, regular surveys should be conducted in these places as well as in areas of recent rains in Ethiopia and Yemen during the forecast period.

**Eastern Region.** Dry weather conditions prevailed during March and only localised changes in the ecological conditions resulted from the heavy rains registered in southern Pakistan in mid-February. Small-scale breeding is expected to occur during the forecast period in the spring breeding areas along the coast and in the interior of Baluchistan in Pakistan with a likely extension to adjacent areas of Iran. However, locust numbers are expected to remain below threatening levels. The joint border survey of the spring breeding areas between Iran and Pakistan is due to start on 1 April. Thereafter, if necessary, regular monitoring should continue in all of these areas during the forecast period. No locusts were reported elsewhere in the region and no significant developments are likely.

The FAO Desert 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 Locusts and Other Migratory Pests Group, AGP Division, FAO, 00100 Rome, Italy. It is also available on the Internet.

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No. 294

## DESERT LOCUST BULLETIN



### Weather & Ecological Conditions in March 2003

**Only a few patches of green vegetation persisted in the Western Region where the conditions were generally unsuitable for locust breeding and survival. Conditions were improving in the spring breeding areas in Ethiopia and on the southern Red Sea coastal plains in Yemen. Despite heavy rains in southern Pakistan in mid-February, conditions did not significantly improve in the spring breeding areas of South-West Asia.**

In the Western Region, little rain was reported or is thought to have occurred in the locust breeding areas during March, the third consecutive month of poor rain. Ecological conditions are reported to be only suitable for locust survival in restricted areas of central Mauritania and to be unsuitable for survival and breeding in the North. As a result of frontal systems which successively affected Morocco, Algeria and northern Libya from mid-March, light to moderate rains fell over the eastern side of the Atlas Mountains, in Morocco (Ouarzazate 33 mm, Errachidia 5 mm on 17 March). During the same period, moderate rains fell over central Algeria. Consequently, except in some parts of southeastern Morocco and of western Hoggar where there were still patches of green vegetation, conditions were unsuitable for breeding or for locust survival in most of the Desert Locust habitats and the vegetation was drying out.

In the Central Region, no significant rainfall was reported in the region. In Sudan, vegetation was drying out in the northern coastal plains, except in some places near Tomala in wadi Muharak/Okko, and on the coastal plains between Port Sudan and Tokar Delta. Vegetation is thought to be slowly developing south of Tokar Delta. In Eritrea, vegetation was dry along the coastal plains between Hirgigo and Kezan except for two surveyed places in Gedged and Hirgigo. In Ethiopia, the short rains season started in the third dekad of February (Harar received 77.2 mm in four consecutive days) but during the first half of March only isolated showers fell over the winter-spring breeding areas. From mid-March, widespread, heavy and frequent rainfalls were reported in the winter breeding area, at Shider, Leffesa, Teferi Ber and

Dire Dawa (24 mm on 18 March). Consequently, the vegetation was greening in these areas. In Djibouti, surveys as well as satellite imagery indicated that vegetation was locally greening. In northern Somalia, vegetation is drying out on the escarpment between Cunaqabad and Haleya. Light rains fell on the Red Sea coastal plains near Hodeidah, Yemen, on 1 and 20-21 March. As a result, vegetation was slightly developing in this area as well as in the summer breeding areas, where rains occurred in February. Vegetation is drying out elsewhere along the coastal plains of Yemen and Saudi Arabia. In northern Oman, vegetation was developing along the coast and in adjacent areas of the interior, extending to adjacent parts of the UAE.

In the Eastern Region, dry weather prevailed throughout March. During the first half of the month, light rains were only reported from Panjgur and Quetta respectively on 1 and 2 March, in Pakistan. Despite the unusually heavy rains which fell over a large area of southern Pakistan and adjacent areas in mid-February, there was no significant development of the vegetation except in the interior of Baluchistan, near Turbat, and in the southeastern part of the Thar Parkar desert, Pakistan, and in the Rajasthan, India, near Jaisalmer and Bikaner. Consequently, favourable conditions for breeding were mainly restricted to some parts of the interior of Baluchistan.



### Area Treated

Algeria 550 ha



### Desert Locust Situation and Forecast

( see also the summary on page 1 )

#### WESTERN REGION

##### **Mauritania**

##### • SITUATION

No surveys were carried out in March. However, 30 adults and 34 L1 to L5 hoppers were reported by a locust scout at one location (1945N/1423W) close to Akjoujt on 24 March.

##### • FORECAST

*No significant developments are likely.*

## Mali

### • SITUATION

No surveys were undertaken during March. However, there were unconfirmed reports of adult and hopper populations in the wadis Tilemsi (2035N/0055E), Amachach (2021N/0046E) and Tachalrhe (2020N/0043E).

### • FORECAST

*Isolated adults may persist in remaining patches of green vegetation in the Timetrine, Tilemsi Valley and the Adrar des Iforas, and could become concentrated. However, no significant developments are likely.*

## Niger

### • SITUATION

No reports received.

### • FORECAST

*Isolated adults may be present in a few places in western Air. No significant developments are likely.*

## Chad

### • SITUATION

No reports received.

### • FORECAST

*No significant developments are likely.*

## Senegal

### • SITUATION

No locusts were observed by the agricultural monitoring and warning bases.

### • FORECAST

*No significant developments are likely.*

## Algeria

### • SITUATION

Mature locust populations, most of which were copulating, reported as solitary to transiens were seen at densities varying from a few up to 600 adults/ha during surveys carried out in Western Hoggar on 9-17 March. The size of the infestations varied from 2 to 200 ha (average: 50 ha) and the total infested area was of 1062 ha. In one location (2225N/0347E), mature adults were mixed with L2; in another one (2242N/0357E), they were laying.

### • FORECAST

*Small-scale breeding may continue in western Hoggar in the remaining patches of green vegetation but is likely to diminish with the drying out of the conditions.*

## Morocco

### • SITUATION

No surveys were carried out and no locusts were reported during March.

### • FORECAST

*No significant developments are likely.*

## Libyan Arab Jamahiriya

### • SITUATION

No reports received.

### • FORECAST

*No significant developments are likely.*

## Tunisia

### • SITUATION

No reports received.

### • FORECAST

*No significant developments are likely.*

## Burkina Faso, Cape Verde, Gambia, Guinea Bissau and Guinea Conakry

### • FORECAST

*No significant developments are likely.*

## CENTRAL REGION

### Sudan

#### • SITUATION

Scattered mature adults and edglings at a density of 1200 individuals/ha, mixed with Migratory Locust, were present in an area of 100 ha on the western side of the northern Red Sea Hills in Wadi Muharak (2009N/3549E) on 13 March. Scattered mature adults at lower densities were also observed in four other places near Tomala (2012N/3549E) and Oko (2031N/3547E) the same day. No locusts were seen during surveys carried out on the northern part of the Red Sea coastal plains between Mohamed Qol (2054N/3709E) and Osaf (2146N/3641E) on 14-15 March

#### • FORECAST

*Locust numbers will decline on the Red Sea coastal plains and adjacent subcoastal areas of Wadi Oko as vegetation dries out. Nevertheless, regular monitoring should continue in all of these areas during the forecast period.*

### Eritrea

#### • SITUATION

No locusts were seen during surveys carried out on the Red Sea coast between Hirgigo(1532N/3927E) and Kezan (1625N/3904E) on 21-22 March.

#### • FORECAST

*No significant developments are likely.*



No. 294

DESERT LOCUST BULLETIN



No. 294

## DESERT LOCUST BULLETIN

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### Somalia

#### • SITUATION

No locusts were seen during surveys carried out on the escarpment between Cunaqabad (0931N/4402E) and Haleya (0926N/4410E) on 13-14 March.

#### • FORECAST

*No significant developments are likely.*

### Ethiopia

#### • SITUATION

No locusts were seen during surveys carried out between Harmukale (0949N/4208E) and Aisha (1044N/4234E) in March.

#### • FORECAST

*Although conditions may improve, the likelihood that locusts are present is low and consequently no significant developments are expected.*

### Djibouti

#### • SITUATION

No locusts were seen during a survey carried out on 19 March north-east Tadjoura (1145N/4250E). There was an unconfirmed report from nomads of isolated hoppers in early March in one of the visited places (1204N/4325E).

#### • FORECAST

*No significant developments are likely. However, due to the improvement of the conditions, surveys should be carried out during the forecast period.*

### Egypt

#### • SITUATION

Immature and mature solitary adults were reported several times throughout the month from different points of a farm at Sharq Al-Owainat (2233N/2842E) at densities ranging from a few individuals up to 325 adults/ha. No other locusts were seen during surveys carried out in the Western Desert on 18-21 March.

#### • FORECAST

*No significant developments are likely.*

### Saudi Arabia

#### • SITUATION

No locusts were reported during March.

#### • FORECAST

*No significant developments are likely.*

### Yemen

#### • SITUATION

No locusts were seen during surveys carried out on 11-12 March in the Red Sea coastal plains and along the Gulf of Aden. A late and unconfirmed report indicated that solitary mature adults were seen near Lahij during previous surveys.

#### • FORECAST

*Isolated adults may be present in a few places of central and southern Red Sea coastal plains close to Hodeida as well as along the Gulf of Aden near Lahij. Surveys to clarify the situation should be carried out in these areas during the forecast period.*

### Oman

#### • SITUATION

No locust surveys were carried out during March.

#### • FORECAST

*Despite vegetation development in the North, no significant developments are likely.*

### Bahrain, Iraq, Israel, Jordan, Kenya, Kuwait, Qatar, Syria Arab Republic, Tanzania, Turkey, UAE and Uganda

#### • FORECAST

*No significant developments are likely.*

## EASTERN REGION

### Iran

#### • SITUATION

No reports received.

#### • FORECAST

*Isolated adults may be present in the spring breeding area and regular monitoring should be carried out along the coast near Chabahar and in the interior near Bampur and Saravan, where small-scale breeding is likely to occur during the forecast period.*

### Pakistan

#### • SITUATION

A late report indicated that immature solitary adults at densities of up to 4 per ha were present in a few places along the Baluchistan coast between Suntsar (2529N/6201E) and Gorani (2521N/6322E), at 4 locations in the interior of Baluchistan and at 2 locations between Karachi and Las Bela during the second half of February.

Only isolated solitary adults, mainly immature, at densities of up to 5 per ha were seen at 12 locations in coastal and interior areas of Baluchistan and at 2 locations in Bela district during the first half of March. The highest densities were reported from Bidrang (2603N/6429E) and Romra (2533N/6345E) on 7 March.

• **FORECAST**

*Small-scale breeding is likely to occur during the forecast period in the areas of green vegetation along the coast and in the interior of Baluchistan. However, increased locust numbers are expected to remain below threatening levels. Regular monitoring should continue in all of these areas during the forecast period depending on the outcome of the joint border survey.*

**India**

• **SITUATION**

No locusts were reported after extensive surveys carried out during the second half of February and the first half of March in the winter/spring breeding areas of Rajasthan and Gujarat.

• **FORECAST**

*No significant developments are likely.*

**Afghanistan**

• **SITUATION**

No reports received.

• **FORECAST**

*No significant developments are likely.*



## Announcements

Locust reporting. Affected countries are kindly reminded to make sure that all locust situation reports are sent to FAO HQ by the 28th day of the month so the information can be included in the FAO bulletin for the current month; otherwise, it will not appear until the following month. Reports should be sent even if no locusts were found or if no surveys were conducted.

Reporting by e-mail. After each survey or control operation, affected countries should send completed FAO Desert Locust Survey and Control Forms with a brief interpretation of the results by e-mail to [eclo@fao.org](mailto:eclo@fao.org).

Desert Locust Guidelines. The revised edition in English was issued in September 2001 and is now available from FAO. French and Arabic versions will be released later this year. Please contact the Locust Group for more information.

eLocust. Updated details of a new system for recording and transmitting locust survey and control data collected in the field can be found on the Internet at:

[www.fao.org/news/global/locusts/elocust.htm](http://www.fao.org/news/global/locusts/elocust.htm)

Publications on the Internet. More reports of FAO locust-related meetings are available for downloading at [www.fao.org/news/global/locusts/reports1.htm](http://www.fao.org/news/global/locusts/reports1.htm):

- CLCPANO: 31st session of the Executive Committee (French, Arabic)
- CLCPRO: 1st session of the Western Region Commission (French)
- CRC: 23rd session and 2002-2003 workplans (English, Arabic)
- CRC/EMPRES/DLCO-EA: 1st and 2nd Technical Forums (English)
- EMPRES/CR: 9th and 10th Liaison Officers Meetings (English); 4th Consultative Committee (English)
- FAO: Expert Consultation and Risk Assessment on the Importation and Large-Scale Use of Mycopesticides against Locusts (English)
- SW Asia Commission: 23rd session (English)

Desert Locust research award. The FAO Commission for Controlling the Desert Locust in the Central Region (CRC) is pleased to announce a cash award for outstanding research on Desert Locust. For more details, please contact the CRC Office in Cairo ([munir.butrous@fao.org](mailto:munir.butrous@fao.org)).

Master Trainer Course. Details and photos of a FAO training-of-trainers course on Desert Locust survey, control and training skills held in Oman in October 2002 are available at:

[www.fao.org/news/global/locusts/omntot/totmain.htm](http://www.fao.org/news/global/locusts/omntot/totmain.htm)

2003 events. The following are provisionally scheduled:

- CRC. The 24th Session of the Executive Committee planned in Beirut (Lebanon) on 10-15 April is postponed until further notice.
- EMPRES. The venue of the 6th Consultative Committee and Phase III Planning Workshop has been changed to FAO-HQ, Rome (Italy). Exact dates will be communicated later.
- CLCPANO. Extraordinary Session, Alger (Algeria), 7 June
- CLCPRO. 2nd Session, Alger (Algeria), 8-12 June
- DLCC. 37th Session, FAO Rome, 22-26 September
- EMPRES/CR. 11th Liaison Officers meeting, Djibouti (or Egypt), December.



No. 294

DESERT LOCUST BULLETIN



## DESERT LOCUST BULLETIN

**Glossary of terms**

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

**NON-GREGARIOUS ADULTS AND HOPPERS****ISOLATED (FEW)**

- very few present and no mutual reaction occurring;
- 0 - 1 adult/400 m foot transect (or less than 25/ha).

**SCATTERED (SOME, LOW NUMBERS)**

- enough present for mutual reaction to be possible but no ground or basking groups seen;
- 1 - 20 adults/400 m foot transect (or 25 - 500/ha).

**GROUP**

- forming ground or basking groups;
- 20+ adults/400 m foot transect (or 500+/ha).

**ADULT SWARM AND HOPPER BAND SIZES****VERY SMALL**

- swarm: less than 1 km<sup>2</sup>      • band: 1 - 25 m<sup>2</sup>

**SMALL**

- swarm: 1 - 10 km<sup>2</sup>              • band: 25 - 2,500 m<sup>2</sup>

**MEDIUM**

- swarm: 10 - 100 km<sup>2</sup>          • band: 2,500 m<sup>2</sup> - 10 ha

**LARGE**

- swarm: 100 - 500 km<sup>2</sup>        • band: 10 - 50 ha

**VERY LARGE**

- swarm: 500+ km<sup>2</sup>              • band: 50+ ha

**RAINFALL****LIGHT**

- 1 - 20 mm of rainfall.

**MODERATE**

- 21 - 50 mm of rainfall.

**HEAVY**

- more than 50 mm of rainfall.

**OTHER REPORTING TERMS****BREEDING**

- the process of reproduction from copulation to edging.

**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.

**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.

**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.

**REGIONS****WESTERN**

- locust-affected countries in West and North-West Africa: Algeria, Chad, Libya, Mali, Mauritania, Morocco, Senegal, Tunisia; during plagues only: Burkino Faso, Cape Verde, Gambia, Guidea Bissau and Guinea Conakry.

**CENTRAL**

- locust-affected countries along the Red Sea: Djibouti, Egypt, Eritrea, Ethiopia, Oman, Saudi Arabia, Somalia, Sudan, Yemen; during plagues only: Bahrain, Iraq, Israel, Jordan, Kenya, Kuwait, Qatar, Syria, Tanzania, Turkey, UAE and Uganda.

**EASTERN**

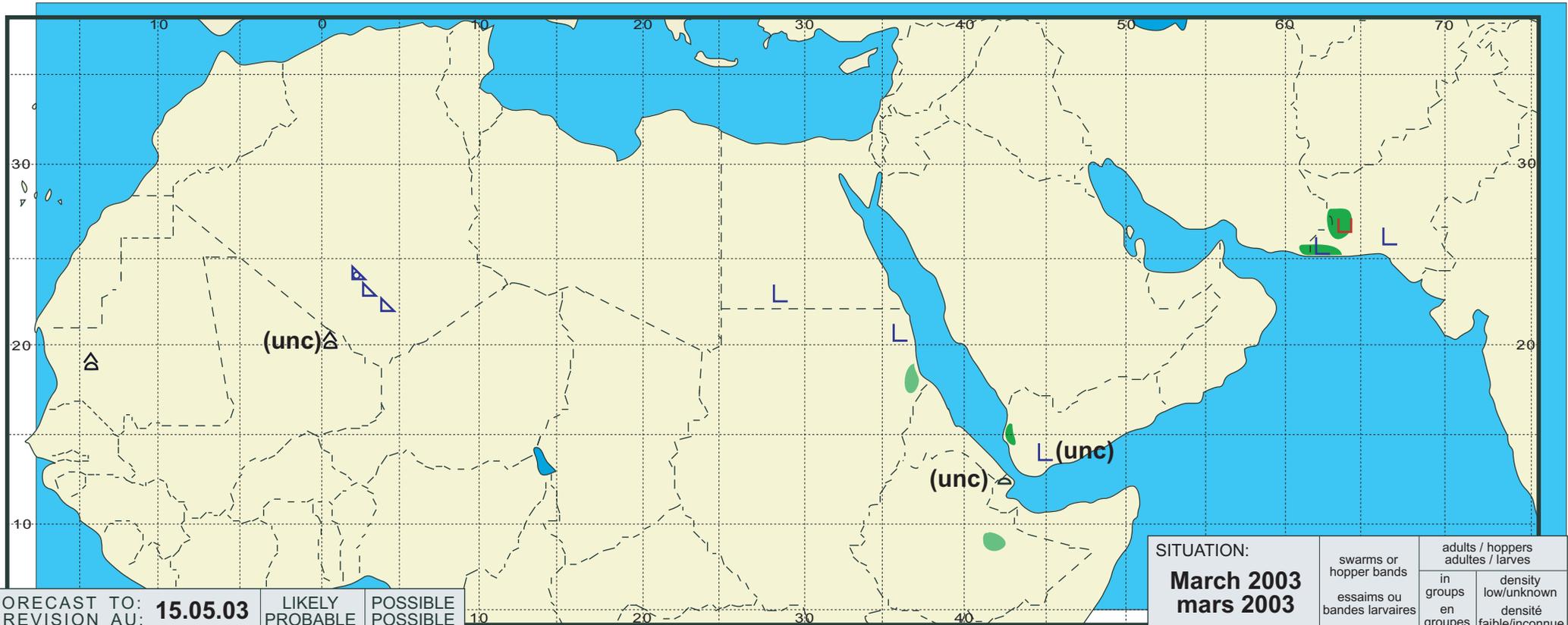
- locust-affected countries in South-West Asia: Afghanistan, India, Iran and Pakistan.



# Desert Locust Summary

## Criquet pèlerin - Situation résumée

294



FORECAST TO: PREVISION AU: <b>15.05.03</b>	LIKELY PROBABLE	POSSIBLE POSSIBLE
favourable breeding conditions conditions favorables à la reproduction		
major swarm(s) essaim(s) important(s)		
minor swarm(s) essaim(s) limité(s)		
non swarming adults adultes non essaimant		

SITUATION:  
**March 2003**  
**mars 2003**

	swarms or hopper bands	adults / hoppers	
	essaims ou bandes larvaires	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 oeufs			
hoppers larves			
hoppers & adults (combined symbol example) larves et adultes (exemple symboles combinés)			