

SITREP.05.04**SITUATION REPORT ON EMERGENCY
TRANSBOUNDARY OUTBREAK PESTS
(ETOPS) FOR MAY WITH A FORECAST
TILL MID-JULY 2004****SUMMARY**

1. **Summary:** This report provides an update on the situation of emergency transboundary outbreak pests (ETOPs) in May with a forecast till mid-July 2004 in the various outbreak and invasion areas in Africa, the Middle-East, and Central and Southwest Asia. The report covers locusts, grasshoppers, armyworm and grain-eating *Quelea* birds. A brief overview on the status of each of these pests for the month is outlined in the remainder of this summary and detailed accounts with a six-week forecast are provided thereafter.

**DESERT LOCUST, *Schistocerca gregaria*
(FORSKAL)**

2. The desert locust, *Schistocerca gregaria* (Forsk.), situation has not gotten any better in May than what it has been over the past several months. The severity of the situation has caught the attention of the Senegalese President who, according to FAO, suggested a summit meeting between heads of states of the nine EMPRES Western region countries to discuss the locust problem. More locusts continued to be seen in Morocco, Algeria, Tunisia and Libya throughout the reporting month. The widespread presence of favorable ecological conditions allowed accelerated breeding in several places. Massive control efforts sprayed more than 918,000 ha

between late April and end of May in these countries. So far, a record 2.6 million plus ha (>6 million acres) have been sprayed in just seven months since the beginning of the current control campaign. This figure has by far surpassed the combined total number of hectares sprayed in the previous ten years. Hopper bands, immature and mature adults of DL mixed with Africa migratory locust were treated in May on some 1,433 ha in southern Egypt and hoppers were also treated on one ha along the Nile River in northern Sudan during this period. The other countries in the central and eastern regions outbreak areas region remained fairly calm.

3. **Forecast:** A serious threat lies ahead in Sahelian West and central Africa, i.e., southern Mauritania, northern Senegal, Mali, Niger, and Chad. Here the beginning of the summer rains will likely coincide with the arrival of the locusts from the spring breeding areas in northern Africa. Once that happens, the locusts will begin breeding profusely and cause severe damage to the summer harvests in the region. Some locusts could also move east into western Sudan where they could breed freely during the forecast period. Locusts from southern Egypt and northern Sudan could also move into the interior of Sudan and further develop and pose a threat to the summer crops. There is a strong indication that the situation is moving toward a serious upsurge which could develop into a full-blown plague toward the end of the summer season. If and when that happens, severe crop losses and critical food shortages will be inevitable. Traditional donors, including USAID and non-traditions donors have so far made cash and in kind contributions worth seven million USD, however, this is far below the

resources required to combat the current invasions. The UN/FAO estimates a shortfall of \$17 million in additional assistance required to effectively respond to the current DL crisis. Even if half of this is made available to the affected countries on time, the development of a plague can be mitigated and the looming disaster could be averted.

OTHER LOCUSTS AND GRASSHOPPERS

4. **Red locust, *Nomadacris septemfasciata* (Surville):** No information was received on the red locust at the time this report was compiled, however, it is likely that some activities might have been in progress in the traditional outbreak areas in Tanzania, Mozambique, Malawi and elsewhere during the reporting month.

5. **Brown locust, *Locusta pardalina* (Walker):** No information was received on brown locust at the time this report was compiled.

6. **Madagascar migratory locust, *Locusta migratoria capito* (L.).** No update was received on *L. m. capito* in May.

7. **African migratory locust, *Locusta migratoria migratorioedes* and others.** Mixed populations of *L. m. migratorioedes* and DL were seen and treated in May on some 1,433 ha at 2219N/2845E, in southern Egypt.

Tree locusts were reported attacking acacia trees in western and southern Darfur, Sudan where season harvests of the Gum Arabic was reduced significantly and offset the price of the product.

8 ***Zonocerus variegatus* (L),** the variegated grasshopper was reported in May in Nioro, Ziguinchor, Kolda, Tambakunda and Sokone,

Senegal. No update was received on *Oedaleus senegalensis* (Krauss) (OES), the Senegalese grasshopper at the time this report was compiled. It is likely that this pest is will begin appearing during the forecast period.

9. ***Dociostaurus maroccanus*, Moroccan locus:** No further report was received on the locust season in Afghanistan that began a couple of months ago and where control interventions were carried out in April in the north (see SITREP 04, May 5,2004). The Italian locust, *Calliptamus italicus* (L), or migratory locust, *Locusta migratoria migratoria* activities in Central Asia that were in recession will likely begin appearing during the forecast period.

10. **Armyworm, *Spodoptera exempta* (Walker).** The armyworm season has come to an end in Tanzania and no further activities are expected until sometimes in November.. No information was received from other countries at the time this report was compiled.

11. ***Quelea quelea* (L).** No information was received on *Quelea* birds at the time this report was compiled. However, it is likely that *Quelea* and other grain eating birds are likely to further breed and pose a problem to small grain cereal growers in Kenya, Tanzania, Ethiopia and elsewhere in the southern outbreak region.

13. **ETOPs in Latin America and the Caribbean (LAC).** No report was received on ETOPs from LAC countries in May. No forecast is being made due to a lack of sufficient information. **End of summary.**

ENVIRONMENTAL SITUATION: WEATHER AND ECOLOGICAL CONDITIONS

13. In May light to medium and at times

heavy rain fell in several places in the spring breeding areas south of the Atlas Mountains in Morocco, Algeria, southern Tunisia and western Libya. As a result breeding conditions continued to be favorable over most of these areas. Conditions were also favorable in Western Sahara, northern Mauritania, and eastern Air Mountains, Niger. Dry conditions persisted in northern Mali.

14. Moderate to heavy rain fell in the interior and coastal areas of northern Somalia. Moderate to light rains were also recorded in the northern red Sea hills and the coast. Green vegetation was present in northern Somalia and parts of Yemen. Dry conditions persisted in other parts of the summer breeding areas in the central region outbreak areas.

15. The Eastern region outbreak areas remained dry and unfavorable conditions persisted throughout May.

16. Light to moderate and at times heavy rains continued to fall in the southern and northern highlands as well as the lake regions, Tanzania. The coastal and southwestern parts of the country received light to moderate rain in May. Other red and brown locust outbreak areas received very light to no rain during the month.

DESERT LOCUST ACTIVITIES

17. **Western and Northwestern Africa**
Outbreak Region: The desert locust, *Schistocerca gregaria* (Forsk.) situation continued to further deteriorate in Morocco, Algeria, Tunisia and Libya in May. The severity of the situation seems to have caught the attention of the Senegalese President who, according to FAO, suggested a summit meeting between heads of states of the nine EMPRES Western region

countries. Massive control efforts sprayed more than 918,000 ha between late April and end of May in these countries. So far, a record 2.6 million plus ha (>6 million acres) have been sprayed in just seven months since the beginning of the current control campaign. This figure has by far surpassed the combined total number of hectares sprayed in the previous ten years. In Morocco, ecological conditions were favorable above the 27th parallel, notably in the Draa Valley, the foothills of the Atlas Mountains, and Hamada de Guir where 3rd to 5th instar hopper bands continued to be seen in May. Small swarms were seen copulating and laying eggs in the northeastern part of the country. Control was focused in localized areas in Ain Beni Mather (34°00'24''N - 02°01'22''W) in the eastern High Plateau with infested areas ranging from 25 to 150 ha at insect densities varying from 7 – 50 individuals/meter square. First generation immature adults from the spring breeding populations were observed in mid-May in Zagora at El fayja (30°18'00''N - 05°58'00''W 30) and Taznakhte (30°27'28''N- 06°57'25''W). The situation in the extreme south-west was generally calm and only small populations of 3rd to 5th instar hoppers were seen in the Laayoune region (27°09'00''N- 13°12'00''W) during the second dekad of May. Morocco has treated more than 452,500 ha in May. Favorable conditions persisted throughout the locust affected areas in Algeria during the first fortnight of May. This period was characterized by continued appearance of hoppers south of the Atlas in the Sahara including wilaya Tindouf, Adrar, Ghandaia, Bechar, Naama,

Laghouat and El Bayadh extended to wilaya El-Oued, Djelfa, Ouargla and Khenchla in the southwest and Illizi in the southeast. Immature adults were seen on some 170 ha in Tindouf on May 2. Adult locusts were seen in Tlemcen, Saida, Tiaret, Medea and Batna. There was a much reduced movement of locusts between Wilayas and natural mortality was raised among females that have already laid eggs. Algeria sprayed more than 370,670 ha from 25 April to 24 May and Libya treated more than 90,000 ha from 21 April through May 24. In **Tiris Zemmout**, northern Mauritania, small to medium size swarms have been observed moving south and southeast into **Adrar** in early May. Immature and mature adults and hoppers were also seen in **Zouerat** areas and **Inchiri** (western part of the country). Swarms were endangering pasture and crops in the oasis areas in **Ouadane** earlier in the month but no detail was available at the time this update was compiled. Despite continued invasions, Mauritania was only able to treat a little over 5,000 ha from 21 April through 20 May due largely to lack of pesticides and funds to cover operating costs. So far, the country has treated close to **323,000 ha** since the beginning of the current campaign on October 10, 2003. It is expected that more areas will be treated during the coming weeks as the country received a consignment of some 34,000 l of pesticides during the first dekad of the month. Niger continued to experience locust invasions in the Air and Tamesna but the migratory pest unit was able to treat only 9,640 ha since the beginning of the current campaign in October. **This may change in the coming weeks as the country received a donation of 5,000 liters of Chlorpyrifos 240 ULV from Morocco on**

May, 29, 2004. Other countries in the region remained fairly calm in May.

Concerned about the on-going widespread spraying of pesticides during the current campaign, AELGA has been working closely with affected countries, FAO and other partners to initiate assessments to help determine the benefits and costs to human, non-target and beneficial organisms, and environmental of the operations. AELGA is pleased to announce that work is underway in Morocco and Algeria along this line and it is anticipated the results of these studies will shed some light on the impact of this kind of operation and other related issues.

18. Forecast: A serious threat lies ahead in Sahelian West and central Africa, i.e., southern Mauritania, northern Senegal, Mali, Niger, and Chad. Here the beginning of the summer rains will likely coincide with the arrival of the locusts from the spring breeding areas in northern Africa. Once that happens, the locusts will begin breeding profusely and cause severe damage to the summer harvests in the region. There is a strong indication that the current locust situation is moving toward a serious upsurge which could further develop into a full-blown plague toward the end of the summer season. If and when that happens, considerable crop losses and severe food shortages will become the order of the day in the front line countries. The only way that can be avoided is by making resources available to help implement timely and effective control interventions. Traditional donors, including USAID and non-traditions donors have so far made cash and in kind contributions worth seven million USD, however, this is far below the resources required to combat the current

invasions. The UN/FAO estimates a shortfall of \$17 million in additional assistance required to effectively respond to the current DL crisis. Even if half of this is made available to the affected countries on time, the looming disaster could be reasonably mitigated.

19. Eastern Africa, Northeastern Africa, and the Near East Outbreak Region:

Hopper bands, immature and mature adults of DL mixed with Africa migratory locust were treated in May on some 1,433 ha in southern Egypt. Low density hopper bands were sprayed on one ha along the Nile River in northern Sudan. The other countries in the region remained fairly calm in May.

20. Forecast: Some locusts could possibly move east from northern and northwestern Africa into western Sudan where they could breed freely. Movement of locusts from southern Egypt and northern Sudan into the interior of Sudan here they could further develop and pose a threat to the summer crops may also occur during the forecast period. Other countries in the central region outbreak areas will remain fairly calm and no significant activities are expected during the forecast period.

21. The Eastern region spring breeding areas remained dry and only a few individual locusts were seen in western Pakistan and eastern Iran May.

22. Forecast: The eastern region outbreak areas will likely remain calm during the forecast period.

OTHER LOCUST AND GRASSHOPPER ACTIVITIES

23. Red locust, *Nomadacris septemfasciata* (Surville): No information was received on

the red locust at the time this report was compiled; however, it is likely that some activities might have been in progress in the traditional outbreak areas in Tanzania, Mozambique, Malawi and elsewhere during the reporting month.

24. **Forecast:** Concentrations of adult locusts and could give rise to small swarms and dense populations in the traditional outbreak areas in Iku-Katavi plains, Wembere plains, Malagarasi basin and Rukwa Valley in Tanzania. The other outbreak areas will likely remain fairly calm during the forecast period.

25. **Brown locust, *Locustnaa pardalina*., (Walker):** No information was received for May on brown locust at the time this report was compiled.

26. **Madagascar migratory locust, *L. migratoria capito* (L.).** No report was received on the Madagascar migratory locust in May and no major activity is expected during the forecast period..

27. **African migratory locust, *Locusta migratoria migratorioides*.** Mixed populations of L. m. migratorioides and DL were seen and treated in May on some 1,433 ha at 2219N/2845E, in southern Egypt.

28. ***Zonocerus variegatus* (L),** the variegated grasshopper was reported from Nioro, Ziguinchor, Kolda, Tambakunda and low density hoppers were also seen in Sokone, Senegal. The later area is normally heavily infested by the pest and the incidence may be the result of a biopesticide trial conducted to investigate its effects on the pest. The pest was seen attacking vegetables and fruits. No reports were received on ***Oedaleus senegalensis* (Krauss) (OES),** the Senegalese grasshopper in May. It is likely that ZVA will

continue appearing and OSE will begin developing during the forecast period.

29. **Moroccan locust, *Dociostaurus maroccanus*.** No further report was received in May on locust activities season in Afghanistan that began a couple of months ago and where control interventions were carried out in April in the north (see SITREP 04, May 5, 2004). The Italian locust, *Calliptamus italicus* (L), or migratory locust, *Locusta migratoria migratoria* activities in Central Asia that were in recession will likely begin appearing during the forecast period. AELGA will continue monitoring the situation in collaboration with its partners at the FAO's Migratory Pest Unit, GTZ and others and issue updates as necessary.

30. Forecast: It is likely that locust activities in Afghanistan will continue. Other locusts -- Italian locust *C. italicus* (L) and the *D. maroccanus* will likely begin appearing in Central Asia during the forecast period.

31. Note: The Afghanistan Plant Protection and Quarantine Department was able to carry out limited survey and control operations with the assistance of the UN/FAO and donors. However, shortage of technical and material resources will continue impeding its capacity to carry out full-scale and regular survey and monitoring as well as organizing and launching control operations. Thus, it is likely that external assistance will continue to play a significant role in PPQD's efforts to implement effective locust campaign in this country for quite sometime.

ARMYWORM ACTIVITIES

32. **Armyworm, *S. exempta* (Walker).** The armyworm season has come to an end in Tanzania and no further activities are expected until sometimes in November.. No information

was received from other countries at the time this report was compiled.

33. Forecast: It is likely that armyworm outbreak will be seen in Kenya and Ethiopia during the forecast period. Tanzania will be likely free of armyworm until November when some activities may be seen.

QUELEA BIRD ACTIVITIES

34. **Red-billed quelea, *Quelea quelea* (L.).** No information was received for May on Quelea birds at the time this report was compiled.

35. Forecast: Quelea and other grain eating birds will likely breed and pose a problem to small grain cereal growers in Kenya, Tanzania, Mozambique, South Africa, Ethiopia, Sudan, Zimbabwe and other outbreak during the forecast period.

36. **ETOPs in Latin America and the Caribbean (LAC).** No report was received on ETOPs from LAC countries for May. No forecast is being made due to a lack of sufficient information.

RECOMMENDATIONS

37. Favorable ecological conditions persisted in several locations in Morocco, Algeria, Tunisia, Libya and parts of Niger. Locusts continued to further breed and increase in numbers in the spring breeding areas in Algeria, Morocco, Tunisia and Libya in May. Control interventions continued in Algeria, Morocco, Tunisia and Libya, but severely hampered in Mauritania and Niger due to lack of resources. **A serious threat lies ahead in Sahelian West and central Africa, i.e., southern Mauritania, northern Senegal, Mali, Niger, and Chad. Here the beginning of the summer rains will likely coincide with**

the arrival of the locusts from the spring breeding areas in northern Africa. Once that happens, the locusts will begin breeding profusely and cause severe damage to the summer harvests in the region. Hence, regular survey, monitoring, reporting and aggressive and coordinated control interventions are required to avert any undesirable consequence.

38. The Assistance for Emergency Locust/Grasshopper Abatement project (AELGA), formerly known as Africa Emergency Locust/Grasshopper Assistance under the USAID's Bureau for Democracy, Conflict, and Humanitarian Assistance (DCHA), Office of U.S. Foreign Disaster Assistance (OFDA), continue monitoring ETOP situations in close collaboration with its partners, including the UN/FAO-MPU and EMPRES Regional Programs, DLCO-EA, IRLCO-CSA, host-country counterparts, etc. and provide assistance and updates.

ACTION BEING REQUESTED

39. USAID field Missions with portfolios on food security, agriculture, environment, and conflict are solicited to encourage host country counterparts to send us updates on ETOPs. FEWS field personnel are solicited to share with us information they may obtain on ETOP activities. Regional organizations with ETOP mandates and host country partners are kindly requested to send us their updates by the last day of the reporting month or within the first two days of the forecasting months.

Unsolicited updates on ETOPs activities are much appreciated.

Please, forward reports, updates, questions, and/or requests to: Dr. Yene T. Belayneh: ybelayneh@ofda.net FAX: 202-347-0315; Phone: 202-661-9374 (USA)

40. LINKS AND INFORMATION

For more information on the weather conditions, you may visit the following web sites:

<http://www.fews.net/>

<http://www.fao.org/giews/english/giewse.htm>

For more information on ETOP activities and related issues, you may visit:

<http://www.fao.org/news/global/locusts/Locuhome.htm>

<http://www-web.gre.ac.uk/directory/NRI/quel/>

<http://icosamp.ecoport.org/>

<http://www.fao.org/EMPRES/default.htm>

- **TO LEARN MORE ABOUT OUR ACTIVITIES, PLEASE, VISIT US AT OUR WEB SITE: WWW.AELGA.NET**

- **UPCOMING EVENT**

 **Pesticide Stewardship Networking Workshop, Tanzania**

For more information please, contact: Dr. Yene T. Belayneh

u:/.../sitreps2004/sitrep.05.04.May.CLMN.doc