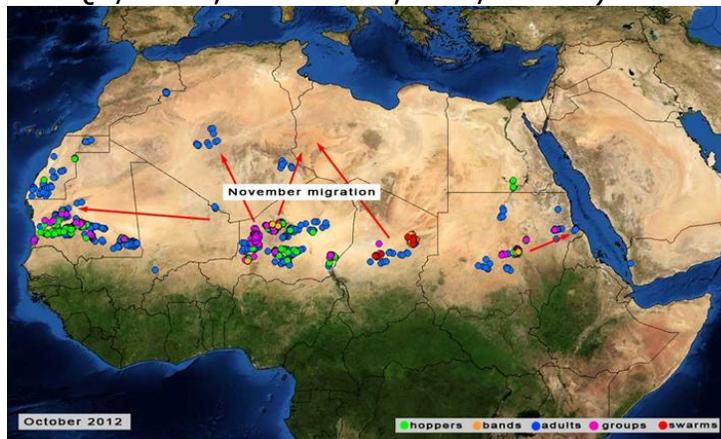


**Emergency Transboundary
Outbreak Pest (ETOP) Situation
Report for October with a
Forecast till mid-December, 2012**

Summary

The Desert Locust (SGR¹) continued further developing and hopper bands and swarms were forming in northeast and northwest Chad in October. In Niger, control teams are treated groups of hoppers and adults near Tahoua, on the Tamesna Plains and along the western side of the Air Mountains. The situation in northern Mali is expected to be similar to that in Niger, but it could not be confirmed due to insecurity. National survey teams continue to monitor cropping areas in central Mali where a few isolated locusts were detected. In Mauritania, hoppers and adults are forming groups in the northwest near Akjoujt and in the center near Tidjikja where small-scale breeding is reported. Survey and control interventions continued and the national locust control center has treated more than 4,720 ha since October 5th. The center is planning a meeting sometime after mid-November to update partners and discuss the ongoing locust situation in the country and its potential implications. In Sudan, surveys were carried out in Khartoum State where groups of hoppers were controlled. Copulating solitary adults were also seen in some places and low density mature adults were reported at many locations where

vegetation was near green and the soil was wet. Some isolated adults were reported in southern Egypt and along the Red Sea coast in Yemen and low numbers of solitary adults persisted in a few places in Rajasthan, India and in adjacent areas in Pakistan. Other outbreak/invasion countries remained calm during this period (DLCD/Libya, DLCO-EA, DPPQS/India, FAO-DLIS, PPD/Sudan).



(DL swarms and adults in Niger, Chad, and perhaps Mali will begin migrating north and northwest into northern Africa and Mauritania and from interior of Sudan to the coastal areas, FAO-DLIS, November, 2012)

Forecast: With the vegetation drying up, the swarms from Chad, Mali and Niger will begin moving northward towards northwestern Mauritania, southern Algeria and southern Libya in the coming weeks. Some swarms could reach western Algeria, southern Morocco and Western Sahara. The swarms will settle in areas that receive rainfall, mature and lay eggs in about December. Frontline countries in northern and northwestern Africa have been alerted and are making necessary plans for survey and control and are working closely with FAO updating the regional workplan that was developed at the 40th DLCC Session in June 2012 in Rome.

¹ Descriptions of all acronyms can be found at the end of the report.

Other ETOPs

Red (Nomadic) Locust (NSE): The NSE situation remained relatively calm during October. Only a good number of adult locusts persisted in Ikuu-Katavi and Wembere plains and Malagarasi Basin in Tanzania, Buzi-Gorongosa and Dimba plains in Mozambique, and Kafue Flats in Zambia. Low density swarms persisted in Lake Chilwa/Lake Chiuta of Malawi. Breeding may have commenced in Malagarasi Basin, Buzi-Gorongosa and Lake Chilwa/Lake Chiuta plains of Malawi where significant rains were received (IRLCO-CSA).

Madagascar Migratory Locust (LMC): No update was received on LMC at the time this report was compiled. The situation is expected to have further receded as conditions continued becoming unfavorable, but will commence with the onset of the seasonal rains in November/December (AELGA).

Moroccan (DMA), Italian (CIT) and Migratory (LMI) locusts in Central Asia and the Caucasus (CAC): No update was received at the time this report was compiled, however, locust activities are expected to have ended in the southern CAC and other areas and will remain calm most of fall and throughout the winter season (AELGA).

Tree locust (Anacridium sp.): No report was received on tree locusts that were seen attacking acacia trees and controlled in Turkana County in Kenya (AELGA).

African Armyworm (AAW): AAW outbreak was reported causing damage to maize crop in Enbu in Kenya. Control was carried out by the affected farmers with assistance from the Ministry of Agriculture (AELGA, DLCO-EA, IRLCO-CSA).

Forecast: AAW activities will likely commence from November on in the IRLCO-CSA member-countries in the southern and south-central outbreak areas. Trap operators are advised to set-up traps prior to the onset of the seasonal rains and begin monitoring AAW situation and provide accurate and timely forecast (AELGA, DLCO-EA, IRLCO-CSA).

Quelea (QQU): QQU bird roosts were reported in Nyanza, Kisumu and Busia counties of Kenya threatening 1,500 ha of irrigated rice. Control was carried out against 5 roosts and progressed against additional 6 roosts through the end of October (DLCO-EA, IRLCO-CSA).

Forecast: QQU birds will continue posing a threat to small grain growing areas in Kenya and Zimbabwe. PPD staff should remain vigilant (for more information on the potential impacts of QQU birds on crops, please, refer to page 7 below) (AELGA, IRLCO-CSA).

OFDA/AELGA (Assistance for Emergency Locust and Grasshopper Abatement) will continue monitoring ETOP situations closely in all regions and issue updates and advices as often as necessary. End summary

Progress in SGR Frontline Countries:

Sahel West Africa's SGR frontline countries (FCs) namely **Chad, Mali, Mauritania, Niger** have established autonomous

national locust control units (CNLA) that are responsible for DL activities.

Funds provided by the African Development Bank, USAID, the World Bank, France, FAO, host-governments, neighboring countries and others enabled the FCs to equip CNLAs with necessary tools, materials and strengthen the infrastructure as well as help train staff to prevent and respond to SGR outbreaks. This has helped frontline countries in the region to avoid the threats the SGR pose to food security and livelihoods of vulnerable communities.

However, the ongoing insecurity situation in the regional, particularly in northern Mali and parts of Niger continue undermining implementation of timely and effective survey and control interventions in these countries.

CNLAs' efforts to avert mitigate or respond to potentially devastating SGR outbreaks and invasions deserve encouragements and support – a good example of **sustainable disaster risk reduction** with modest input.

OFDA ETOP Activities and Impacts

- OFDA/TAG continues its initiatives in pesticide risk reduction through stewardship network (PRRSN) programs to ensure safety of vulnerable people and protect their assets and the shared environment against pesticide pollution. OFDA/TAG successfully launched two sub-regional PRRSNs in Eastern Africa and the Horn. The Horn of Africa PRRSN initiative has created a sub-set Association in Ethiopia (PSA-E).

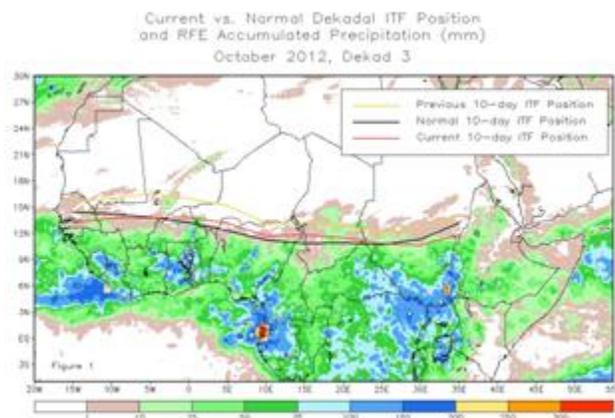
- Discussions that began several months ago to launch similar PRR initiatives in North Africa and the Middle East were halted by the unrests manifested in the regions. An effort is underway to resume dialogue with partners in the region.
- OFDA continued its assistance for DRR through capacity strengthening programs with FAO to mitigate, prevent, and respond to and reduce the risk of ETOP emergencies.
- OFDA's assistance for obsolete pesticide prevention and management has enabled FAO to develop a system for monitoring, managing and reporting pesticide inventories (PSMS) in ETOP prone countries. Participating countries are able to conduct regular monitoring and make decisions concerning their stocks to prevent accumulation of obsolete stocks.
- For the first time, OFDA is supporting a program through FAO to strengthen national and regional capacities in Central Asia and the Caucasus (CAC) to coordinate locust monitoring and reporting and plan prevention and mitigation efforts to abate and minimize the threats they pose to food security and livelihoods of vulnerable populations.
- OFDA just recently approved a three-year fixed obligation grant to support a project on scaling up community-based armyworm monitoring, forecasting and early warning in Ethiopia, Kenya and Tanzania. The project is aimed at reducing the risk of armyworm threats to food security and livelihoods of rural communities and vulnerable populations.

Note: All ETOP SITREPs, including the current one can be accessed on our website:

http://transition.usaid.gov/our_work/humanitarian_assistance/disaster_assistance/locust/ end note.

Weather and ecological conditions

From October 11-20, 2012, the Inter-Tropical Front (ITF) remained relatively stationary across West Africa, but advanced further south over parts of eastern Africa. In West Africa, strong southerly winds from the Gulf of Guinea resulted in isolated light to moderate rainfall across Mali, Burkina Faso, and western Niger.

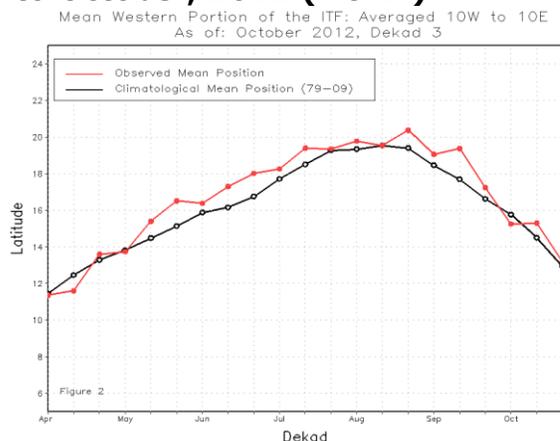


On the other hand, in the eastern segment, strong northerly winds helped push converging winds to the south across Chad and Sudan. The mean western segment of the ITF was centered near 15.3N and 0.8 degree north of the mean average position. The mean eastern portion of the ITF returned to its climatological position and was centered at 12.9N (NOAA, October, 2012)

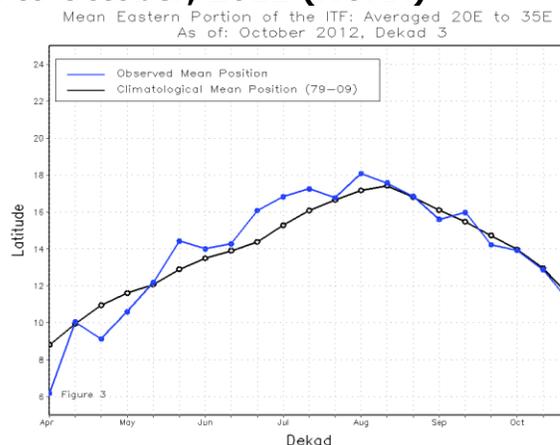
Dry and hot conditions were experienced during early October in most of the NSE outbreak areas. However, the latter part of the month received low to moderate rains at most stations located near NSE outbreak

areas. Moderate rainfall was reported near Malagarasi Basin, Lake Rukwa plains in Tanzania, Lake Chilwa/Lake Chiuta plains in Malawi and the Buzi-Gorongosa plains of Mozambique. Rains started falling during the last two days of October in the Kafue Flats of Zambia (IRLCO-CSA).

Western segment of the ITF positions from April to October, 2012 (NOAA)



Eastern segment of the ITF positions from April to October, 2012 (NOAA)



Note: The shift in the ecology of landscape and changes in the weather patterns are believed to exacerbate the risk of pest outbreaks and a resurgence and even emergence of new pests. Regular monitoring and reporting of anomalous pest situation are essential. End note.

Detailed accounts of the ETOP situation and predictions for the next six weeks are presented henceforth.

SGR - Western Outbreak Region: The SRG continued further developing and hopper bands and swarms were forming in northeast Chad near Fada and further west near Kouba Oulanga in October. In Chad, the national locust control teams treated 1,800 ha of hopper bands and swarms. In Niger, control teams, treated more than 7,500 ha of hopper bands and groups of hoppers and adults near Tahoua, on the Tamesna Plains and along the western side of the Air Mountains. The situation in northern Mali is expected to be similar to that in Niger and Chad but this cannot be confirmed due to insecurity. National survey teams continue to monitor cropping areas in central Mali where a few isolated locusts were detected.

In Mauritania, hoppers and adults are forming groups in the northwest near Akjoujt and in the center near Tidjikja where small-scale breeding is reported. Survey and control interventions continued and the national locust control center has treated more than 4,720 ha since October 5th. The center is planning a meeting on November 18 to update partners and discuss the ongoing locust situation and its potential implications. No locusts were reported in other countries during this period (CNLA/Mauritania, DLCD/Libya, FAO-DLIS).

Forecast: It is expected that adult groups and small swarms will continue forming in Chad, Mali and Niger and begin migrating northwest and north into Algeria and southern Libya and northwestern Mauritania. Some locust may reach southern Morocco/Western Sahara and western Algeria (DLCD/Libya, DLCO-EA, FAO-DLIS).

SGR - Central Outbreak Region: Low numbers of adult locusts moved from the summer breeding areas in Sudan to the winter breeding areas in the northeast and

along the Red Sea coast of the country. Some isolated adults were reported in southern Egypt and along the Red Sea coast in Yemen. Low numbers of solitary adults persisted in a few places in Rajasthan, India and in adjacent areas in Pakistan. No locusts were reported elsewhere in the region during this period (AELGA, DLCO-EA, FAO-DLIS).

Forecast: With the vegetation drying up locusts will further concentrate and form more groups during the forecast period and small-scale breeding will likely commence on the coastal plains along both sides of the Red Sea, primarily in Sudan and to a lesser extent in Egypt, Eritrea, Saudi Arabia and Yemen in areas where rainfall was recorded. Active surveillance must be maintained in all areas (DLCO-EA, FAO-DLIS, PPD/Sudan).

SGR - Eastern Outbreak Region: Low numbers of solitary adults persisted in a few places in Rajasthan, India and in adjacent areas in Pakistan where small-scale breeding occurred earlier, but significant activities were not reported during this period (DPPQS/India, FAO-DLIS).

Forecast: With the monsoon rains ending and vegetation drying up, locust numbers will decline and the situation will likely remain calm during the forecast period (DPPQS/India, FAO-DLIS).

Red (Nomadic) Locust (NSE): The NSE situation remained relatively calm during October. However, significant adult locust populations persisted in Ikuu-Katavi plains, Wembere plains and Malagarasi Basin in Tanzania, Buzi-Gorongosa plains and Dimba plains in Mozambique, and Kafue Flats in Zambia. Low density swarms persisted in Lake Chilwa/Lake Chiuta of Malawi. Breeding was likely to have commenced in Buzi-Gorongosa plains, Malagarasi Basin and Lake Chilwa/Lake Chiuta plains of Malawi where significant rains were received (IRLCO-CSA). Community-based locust reporting groups reported that locusts

were being harvested in Malawi for consumption at the time this report was compiled.



NSE outbreak countries and localities (yellow) and localities (red dots) (IRLCO-CSA, 10/2012)

Forecast: Rains that fell during the latter part of October may have created favorable conditions for mating and possible egg laying at a latter date, particularly in Malagarasi Basin in Tanzania, Buzi-Gorongosa in Mozambique and Lake Chilwa/Lake Chiuta plains in Malawi where significant rainfall was reported. This and the good number of parental populations that persisted in these areas, large-scale breeding is likely in Ikuu-Katavi plains, Wembere plains and Malagarasi Basin (Tanzania), Lake Chilwa/Lake Chiuta plains (Malawi), Buzi-Gorongosa plains (Mozambique) and Kafue Flats (Zambia) during the coming breeding season. IRLCO-CSA plans to conduct surveys to verify areas that will likely experience hopper outbreaks and potential swarms in early 2013 (IRLCO-CSA).

Tree locust (*Anacridium sp.*): No further information was received on tree locusts that were seen damaging acacia trees in Kainuk area, Turkana County in Kenya.

Madagascar Migratory Locust (LMC): No update was received on Malagasy locusts at the time this report was compiled (AELGA).

Forecast: Some locust activities could begin appearing in the outbreak areas as the seasonal rains commence in late November and early December. A well thought out strategy should be put in place beginning October 2012 for the 2012-13 campaign to abate the potential for locust populations to increase and threaten food security of vulnerable communities (AELGA).

Moroccan (DMA), Italian (CIT) and Migratory (LMI) locusts in Central Asia and the Caucasus (CAC): No update was received on DMA, CIT, or LMI at the time this report was compiled. However, DMA activities must have ended in all CAC outbreak areas (AELGA).

Forecast: CIT and LMI will remain calm over the coming months as the winter season sets in (AELGA).



(Locust prone CAC countries, FAO)

Australian Plague Locust (APL): No update was received at the time this report was compiled (AELGA, APLC).

Timor and South Pacific: No update was received in October in Timor and South Pacific.



(Australian plague locust, source: APLC)

African Armyworm (AAW): AAW outbreak was reported in Enbu county of Kenya causing damage to maize crop. Control was carried out by the affected farmers with assistance from the Ministry of Agriculture (AELGA, DLCO-EA, IRLCO-CSA).

Forecast: AAW activities will likely commence from November on in the southern and south-central outbreak areas in the IRLCO-CSA member-countries. Trap operators are advised to set-up traps prior to the onset of rains and begin monitoring AAW situation and provide accurate and timely forecast to the appropriate authorities and the regional migratory pest coordinating organizations (AELGA, DLCO-EA, IRLCO-CSA).

Quelea (QQU): QQU bird outbreaks were reported in Nyanza, Kisumu and Busia counties in Kenya where 11 roosts were reported threatening 1,500 ha of rice crop. Aerial control operations were undertaken by the DLCO-EA spray aircraft. Control operations were still in progress at the time this report was compiled. QQU control operations were also conducted in early October by DLCO-EA aircraft in several locations in Meki areas in the central rift valley in Ethiopia where an avicide-bathion that has not yet been registered in the country for this pest is used on a trial base. A late received report indicated QQU bird control operations in Gerset and Dresä in Eritrea where the birds were seen attacking

Sorghum and Pearl-Millet (DLCO-EA, IRLCO-CSA).

Forecast: QQU birds will continue being a problem to irrigated rice growers in western Kenya. The birds will likely begin breeding in other IRLCO-CSA-member countries and fledglings will begin appearing during the forecast period and persist in small grain growing areas in parts of Kenya and wheat growing areas in Zimbabwe (AELGA, DLCO-EA, IRLCO-CSA).

Facts: QQU birds can travel ~100 km/day looking for food. An adult QQU bird can consume 3-5 g of grain and perhaps destroy the same amount each day. A colony composed of a million birds (very common) is capable of consuming and destroying 7-10 tons or 7,000 to 10,000 kg of seeds/day, enough to feed 15,000-20,000 people for a day.

Rodents: No update was received on rodents in October, but the pest remains a constant threat to both pre- and post-harvest crops and produces in many countries around the globe (AELGA).

Note: Several raptor birds, such as barn owl, *Tyto Alba* and other animals are known nature's biological control agents that contribute to maintaining the balance between outbreaks and a period of lull. **End note.**

Front-line countries where ETOP outbreaks first occur are advised to remain vigilant. Invasion countries should maintain the capacity to monitor and avoid any unexpected surprises. DLCO-EA, IRLCO-CSA, national PPDs, CNLAs, DPVs, ELOs, and others are encouraged to continue sharing information with partners and other stakeholders as often as possible. Lead farmers and community forecasters should be encouraged to remain vigilant and report any ETOP sightings to field agents and other contact persons.

Inventories of Acridid Pesticide Stocks

Inventory for ETOP pesticides changed slightly in October due to control operations that took place in Chad (1,800 ha), Niger (7,500) and in Mauritania (4,230 ha).

Mindful of the risk of pesticides becoming obsolete once passed their end-of-use, ETOP-prone countries, particularly those with large inventories, but less likely to use them within a reasonable time period, are encouraged to test their stocks regularly and determine whether they should use, retain, share or discard them immediately. All options should be explored to avoid the risks that old stocks pose to humans, the environment, and non-target organisms as well as the huge financial burden associated with disposing them.

A judiciously executed triangulation of stocks from countries with large inventories to where there are immediate needs is a win-win deal worth considering.

Note: The core message of **pesticide stewardship Program** is to strengthen the national and regional pesticide delivery systems by linking partners at different levels and thereby reduce pesticide related health risks and environmental pollution and improve food security as well as contribute to the national economy. **End note.**

Estimates of (ETOP-acridid) pesticide inventories

Country	Quantities in '000l/kg ^{\$}
Algeria	1,200~
Chad	106.66~
Eritrea	43.9~
Egypt	Data not available
Ethiopia	1.9+~
Libya	Data not available
Madagascar	Data not available
Mali	208.8d~
Mauritania	182+~

Morocco	4,100~
Niger	20.00+
Senegal	156~~
Saudi Arabia	Date not available
Sudan	~
NSD	860"
Tunisia	167.6~
Yemen	33.00 + .527 kg GM

These quantities include ULV, EC and dust formulations
 ~ data not necessarily current
 ~~ as of September 28, 2011
 l = Mali donated 21,000 l for RL in Malawi, Mozambique and Tanzania late last year and FAO facilitated the triangulation + quantity reported in Agadez @ left-over stocks of Chlopyrifos from the 2003-5 DL campaign was tested for quality and found to be usable through 2012
 This includes EC, ULV and Dust for all crop protection uses
 GM = GreenMuscle
 b = biopesticide (Madagascar)
 c = conventional pesticides (Madagascar)
 g = insect growth regulator (Madagascar)

LIST OF ACRONYMS

AAW	African armyworm (<i>Spodoptera expempta</i> - SEX)
AELGA	Assistance for Emergency Locust Grasshopper Abatement
AFCS	Armyworm Forecasting and Control Services, Tanzania
AfDB	African Development Bank
AME	<i>Anacridium melanorhodon</i>
APL	Australian Plague Locust Commission
APLC	Australian Plague Locust Commission
CAC	Central Asia and the Caucasus
CERF	Central Emergency Response Fund
CIT	<i>Calliptamus italicus</i>
CLCPRO	Commission de Lutte Contre le Criquet Pèlerin dans la Région Occidentale (Commission for the Desert Locust Control in the Western Region)

CNLA/CNLAA	Centre National de Lutte Antiacridienne (National Locust Control Center)	LMM	<i>Locusta migratoria migratorioides</i> (African Migratory Locust)
CRC	Commission for Controlling Desert Locust in the Central Region	LPA	<i>Locustana pardalina</i>
CTE	<i>Chortoicetes terminifera</i>	MoAFSC	Ministry of Agriculture, Food Security and Cooperatives
DDLC	Department of Desert Locust Control	MoARD	Ministry of Agriculture and Rural Development
DL	Desert Locust	NOAA	National Oceanic and Aeronautic Administration
DLCO-EA	Desert Locust Control Organization for Eastern Africa	NSD	Republic of North Sudan
DMA	<i>Dociostaurus maroccanus</i>	NSE	<i>Nomadacris septemfasciata</i>
DPPQS	Department of Plant Protection and Quarantine Services	OFDA	Office of U.S. Foreign Disaster Assistance
DPV	Département Protection des Végétaux (Department of Plant Protection)	PHD	Plant Health Directorate
ELO	EMPRES Liaison Officers	PHS	Plant Health Services, MoA Tanzania
EMPRES	Emergency Prevention System for Transboundary Animal and Plant Pests and Diseases	PPD	Plant Protection Department
ETOP	Emergency Transboundary Outbreak Pest	PPSD	Plant Protection Services Division/Department
GM	Green Muscle (a fungal- based biopesticide)	PRRSN	Pesticide Risk Reduction through Stewardship Network
ha	hectare (= 10,000 sq. meters, about 2.471 acres)	QQU	<i>Quelea quelea</i>
IRIN	Integrated Regional Information Networks	SARCOF	Southern Africa Region Climate Outlook Forum
IRLCO-CSA	International Red Locust Control Organization for Central and Southern Africa	SGR	<i>Schistoseca gregaria</i>
ITCZ	Inter-Tropical Convergence Zone	SWAC	South West Asia DL Commission
ITF	Inter-Tropical Convergence Front = ITCZ)	TAG	Technical Assistance Group
FAO-DLIS	Food and Agriculture Organizations' Desert Locust Information Service	USAID	Unites States Agency for International Development
Kg	Kilogram (~2.2 pound)	UN	the United Nations
L	Liter (1.057 quarts or 0.264 gallon or 33.814 US fluid ounces)	ZEL	<i>Zonocerus elegans, elegant</i> grasshopper
LMC	<i>Locusta migratoriacapito</i>		

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