Despite his many and sustained contributions to the work of the Society, it is for the warmth of Rod's friendship, together with his solid good sense, that most of us will remember him. His lightening sense of humour combined with a rare generosity of spirit made him a delightful companion in the field whose loss will be widely mourned alike amongst both arachnologists and his much wider circle of friends. Our heartfelt sympathy goes to his wife June and to his sister Sue.

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A Button in a Balafon; an Occurrence of the Widow Spider *Latrodectus geometricus* C. L. Koch (Araneae, Theridiidae) in Ireland

by Myles Nolan

In January 2011 a box containing a number of traditional wooden musical instruments originating from Zambia was presented to a school in Limerick, Ireland (Grid ref R1020) and stored in a utility room until the following March. In late March a number of spiderlings were found close to the box which upon investigation was found to contain a dead spider. The spiderlings were dispatched, the entire area sterilised and the box wrapped and moved elsewhere. The dead specimen was retained and sent to the National Biodiversity Data Centre, Waterford whence it was passed onto myself.

The specimen, an adult female was keyed to *Latrodectus* using Levi and Randolph (1975). It was identified to species using Lotz (1994) and Levy and Amitai (1983). The spider is commonly known as a button spider where it occurs in Africa and more generally as a brown widow. It was possible to see the abdominal pattern after re-inflating it by injecting 70% IMS. The species has variable markings, ranging from a pale grey pattern to completely black (Lotz, 1994) and this has led to misidentifications. Internal genitalia were examined by dissection: Levy and Amitai (1983) distinguished the specimen from the North American *L. hesperus* Chamberlin & Ivie, 1935; the copulatory ducts did not extend forward of the anterior spermathecae, distinguishing it from *L. rhodesiensis* Mackay, 1972 (Mackay, 1972; Lotz, 1994). The copulatory ducts are very pale and individual loops somewhat difficult to discern, however the identification was confirmed when three of the species' distinctive egg-sacs were found within one of the instruments later in the year. One of these, a balafon (a xylophone type instrument), was constructed using hollowed out calabash gourds which function as resonators (Fig. 1). Upon lifting the wooden keys the three egg-sacs could be seen suspended inside the largest gourd (Fig. 2) whose opening was covered with a thin, strong layer of silk. The sacs are greyish white, roughly oval and covered with short conical spines; on one a small emergence hole was visible (Fig. 3). I opened the two egg-sacs lacking an emergence hole and found that the larger contained remnants of 156 eggs and 125 dead spiderlings; only one of these died moulting from post-larval stage so the brood must have been close to emerging when they died. The smaller sac contained 130 desiccated eggs showing no signs of development. The sac whence spiderlings had emerged was kept intact for reference purposes. Assuming this would have contained as many, if not more, eggs as the other two, then potentially some 250 to 300 spiderlings could have emerged from the two larger sacs.

Figure 1. Zambian balafon. © Myles Nolan.

Figure 2. Egg-sacs of *L. geometricus* in a calabash gourd. © Myles Nolan.

An obvious point of interest in this occurrence is the venomous bite for which some members of the genus are infamous. *Latrodectus geometricus* seems to be generally less harmful and less aggressive to humans compared with the black-widow spider, *L. mactans* (Muller, 1993; Goddard *et al*., 1983; Almeida *et al.*, 2009) which has also been imported into Ireland (Ross, 1988; O'Connor & Holmes, 1993). Kobelt and Nentwig (2008) predict an increase in the numbers of alien spiders potentially harmful to humans in Europe. Symptoms and signs of *L. geometricus* envenomation are usually confined to the immediate area of the bite and the administration of anti-venom is not necessary, however the bite can be acutely painful (Almeida *et al.*, 2009) and characterised by a wide range of potentially disturbing clinical features (Snyman and Larsen, 2005); a number of envenomations that provoked a strong adverse reaction were recorded recently in the USA (Goddard *et al.,* 2008).

Latrodectus geometricus is now a cosmopolitan species (Platnick, 2011) that has been introduced to Israel (Levy & Amitai, 1983), North America (where it is spreading rapidly throughout some of the Southern States (Goddard *et al.,* 2008)) Hawaii, Australia, Japan (Garb *et al*., 2004) and also India (Shukla and Broome, 2007). I am aware of a single record in Europe, a specimen imported into Belgium from South America (Keer, 2007). The

Figure 3. Egg-sac with emergence hole. © M. Nolan.

species used be considered part of the Iberian fauna, but specimens were misidentified (Melic, 2000).

Doubt surrounds the originating point for the species' global peregrinations; a recent genetic analysis does not conclusively support an African origin (Garb *et al*., 2004), the authors noting the species was known from both South America and Africa when originally described.

Given that *L. geometricus* is a quite accomplished global traveller its occurrence in Ireland cannot be taken as being so unusual as might first seem. More members of the Theridiidae are introduced into Europe than any other family and introductions from the Afrotropical region constitute about 12% of the total (Kobelt and Nentwig, 2008). *L. geometricus* has probably arrived in Europe more frequently than readily available records suggest (Helsdingen, 2011).

What is most significant about the Irish record is that two of the egg-sacs (whether set in Africa, in transit, or in Ireland) produced living spiderlings, a factor that greatly assists a successful colonizing event. Ireland's cool climate is most unlikely to attract permanent, reproducing colonies of *L. geometricus* outdoors and since all the specimens seen were killed or already dead, it remains in doubt whether spiderlings could have survived to reproduce indoors. However, most successful alien introductions come from synanthropic habitats (Kobelt and Nentwig, 2008) and *L. geometricus* does make frequent use of artificial environments, most bites occurring within or immediately around buildings (Müller, 1993). It is plausible the species could colonise warm, temperature controlled environments even in Ireland.

The specimen, egg-sacs and their contents are now in the collection of the Natural History Museum, Dublin.

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Steatoda nobilis Established in Southern California

by Rick Vetter

It might be of interest to the B.A.S. readership that the combfoot spider *Steatoda nobilis* has been collected at several locations in southern California. The specimens were found in Ventura County, which is directly west of Los Angeles County. I discovered the spiders whilst searching and documenting the presence of the newly establishing and still spreading brown widow *Latrodectus geometricus*. Instead of finding brown widows, I readily