Project update: January 2018

I have started the autumn-winter fieldwork in the Rio Balsas Basin. Currently I have collected 240 diet samples, of which I have analysed 135. Within them I found 13 different species of plant pollen grains which the bats of the genus *Leptonycteris* feed on. Among them are several species belonging to the genera, *Agave*, *Ipomoea* and *Ceiba*. Regarding the catches to determinate foraging activity, I have been working in several points that are potentially feeding sites for *Leptonycteris nivalis* and *Leptonycteris yerbabuenae* giving priority to the sites where flowering plants of the genera *Agave* and *Ipomoea* are observed, because these have been the most abundant genera in the diet. Finally, six of the eight sites historically reported as roosting sites of *L. nivalis* have been already visited. In five of them the species was not found. However, in one of them I found a large number of individuals during November 2017, of which there were approximately 50% females and 50% males, many of which were sexually active. All of the above could indicate that this site is possibly a mating refuge, which would be a great contribution to the conservation of the species, since currently there is only one refuge known as a mating cave for *L. nivalis*. In all the sites that have been visited I have talk with the inhabitants of the nearby towns about the ecological and economical importance of bats, specifically of the bats of the genus *Leptonycteris,* providing in some cases posters and informational material about the bats.

The next step now is to start with the spring-summer season in the Metztitlan Canyon Biosphere Reserve as well as continue visiting the sites reported as historical roosting sites for *L. nivalis*. In the same way, I will look for the implementation of environmental education programmes in schools located in the towns surrounding the study sites.

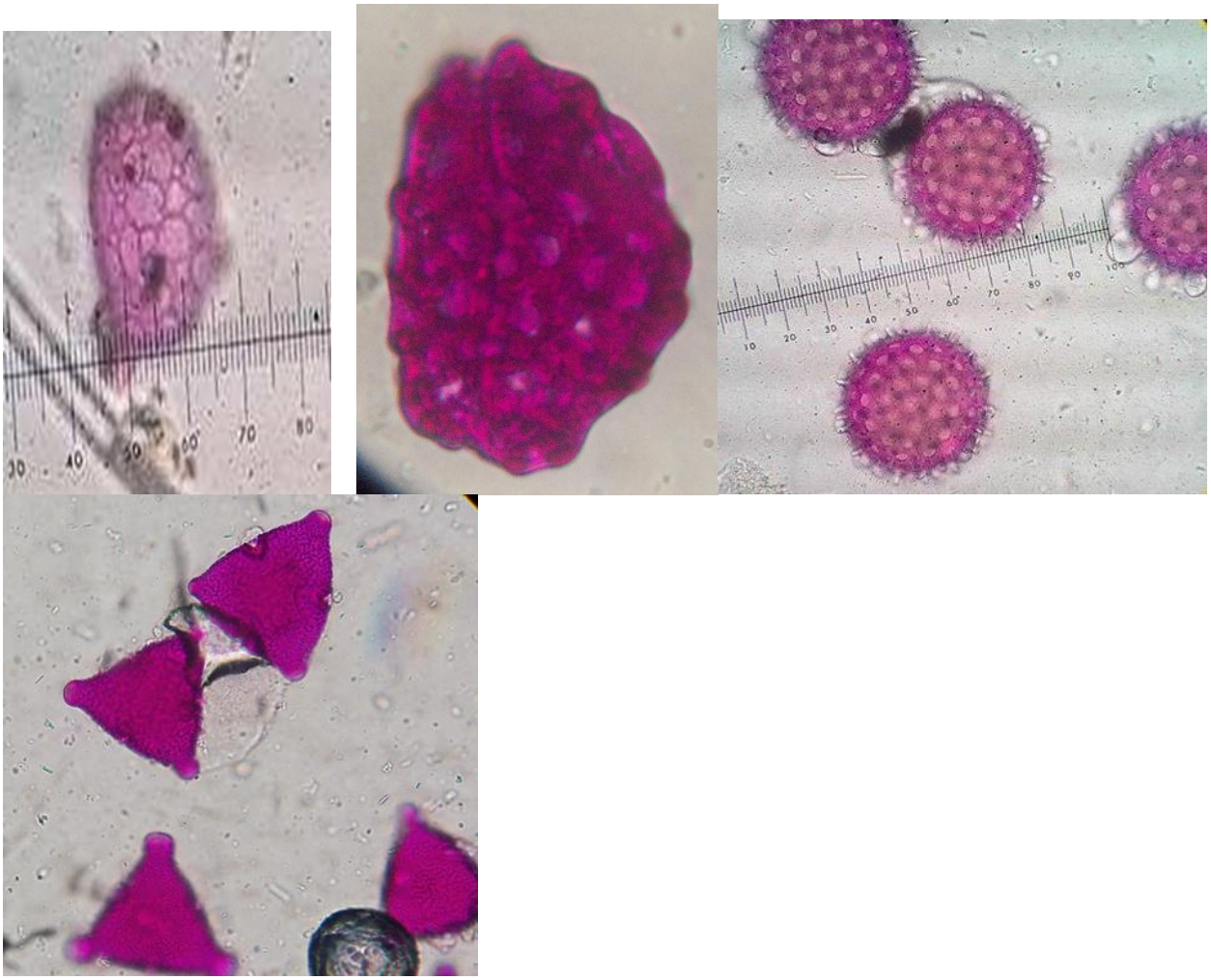
Diet sampling in caves. Above left: *Leptonycteris nivalis* captured returning from foraging at Cueva del Diablo, Tepoztlán, Morelos. Above right: *Leptonycteris yerbabuenae* captured returning from foraging at Cueva del Salitre, Ticumán, Morelos. Below: mist net placed at the entrance of Cueva del Salitre, Ticumán, Morelos.

Taking out individuals caught in foraging in front of flowering plants of the genera *Agave* (left) and *Ipomoea* (right).

Flowering of the *Ipomea* genus in the autumn-winter period in the Rio Balsas Basin.

Taking data from flowering plants to determine the food resources available for bats of the genus *Leptonycteris*.

Cleaning and assembly of pollen samples obtained from gelatins and faeces.



Pollen grains found in the diet of both species of *Leptonycteris*. Above: Pollen grains belonging to two different species of the genus *Agave*. Below right: pollen grain of *Ceiba aesculifolia*. Below left: pollen grain belonging to *Ipomoea murucoides*.