The Centro de Investigación Científica de Yucatán, A.C. (CICY) is a public center of scientific and technological research, which forms human resources and generates knowledge in the various fields of science, from the biological sciences to the area of materials and sustainable energy development. Among the most important aspects of the center is the Regional Xíitbal neek’ Botanical Garden, which was founded in 1983. Its regional aspect refers to the flora of the Yucatan Peninsula as an object of study, and its Mayan name means: the place where the seeds sprout, referring to the ex situ cultivation of wild species from seed. Its collections contribute to the conservation of regional plant resources, either conducting or supporting research on the regional flora, letting know people its importance and value or supporting specific conservation activities. It was declared a Living Museum of Plants by the Secretariat of Environment and Natural Resources and registered as a Management Unit for Wildlife Conservation (key MA-SEMARNAT-0169-JB-YUC-09). At the same time, Laboratory Scanning Electron Microscopy (SEM) has been working since 2004 to support research both within the research center and research centers in the region. The scanning electron microscope has been particularly important and has contributed to the imaging and EDS microanalyses for comparative studies of plant tissues; systematic and phylogenetic studies in plants (pollen, trichomes, waxes, seed); morphology of tissues infested by fungi, morphological characterization of the development of many plant species and taxonomic studies and microorganisms (phycoflora, yeast); anatomy of wood; metal content in plant tissues, microanalysis from archaeo-paleontological samples. Besides the valuable information for scientific study carried out both at the Centre for Research and for the country, the microscope is a strong diffusion tool, because through image, species of tiny dimensions imperceptible to the human eye can be observed. Throughout Multidisciplinary we can converge and disclose to children, youth and adults the importance of scientific progress. Gathering this tool (the microscope) with today’s natural wealth within the botanical gardens, in order to preserve our natural resources. The pictures from the summary belongs to the representative vegetation of the Regional Botanic Gardens. The image was obtained using a Scanning Electron Microscope JEOL 6360LV, Laboratory of Scanning Electron Microscopy CICY.
Fig. 1: Yucatan’s Scorpions which are members of the class Arachnida and are closely related to spiders, mites, and ticks.

Fig. 2: Morphology details of Acalypha Hispida (Euphorbiaceae) flower in Yucatán, México.

Fig. 3: Morphology of Artemisia (Asteraceae) pollen grain in Yucatán, México.