46th APIMONDIA - International Apicultural Congress

[Lead-off] Policies for pollinator-friendly agricultural landscapes

L.A. Garibaldi

IRNAD, Universidad Nacional de Río Negro, Bariloche, ARGENTINA

Pollinator diversity is being lost at an alarming rate. One of the main causes of this loss is the land-use change caused by the expansion of conventional agriculture and livestock production. Management practices such as monocultures and the intensive use of agrochemicals reduce the number of species of plants, birds, bees and other taxonomic groups, and increase, at the same time, the relative abundance (dominance) of one or a few cultivated and wild (e.g., weed) species. Given that ~40% of the terrestrial surface is occupied by crop and livestock lands, it is critical to increase food production without destroying pollinator diversity. In addition to the value given by its ethical and spiritual dimensions, and the potential use of future generations, in this talk I will discuss the value of biodiversity for agriculture, using pollinators as a case of study. Paradoxically, conventional agriculture is reducing pollinator diversity, but this diversity is necessary for increasing productivity (and its temporal and spatial stability) of many crops. Several studies show that the loss of wild pollinator diversity cannot be replaced by a high abundance of a single pollinator species (dominance). Therefore, I will discuss actions that producers, consumers, politicians and scientists can take to recover diversity. For example, producers can implement management practices in- and outside the crop fields to increase floral and nesting resources, and therefore pollinator abundance and diversity. In addition, consumers can modify diets, reduce waste and produce food at small scales, among many other actions. One single strategy will not be enough to solve the dilemma of producing food and preserving biodiversity: multiple actions must be taken urgently from all the stakeholders