



Native bees from the state of Nuevo Leon: filling information gaps in northeast Mexico.

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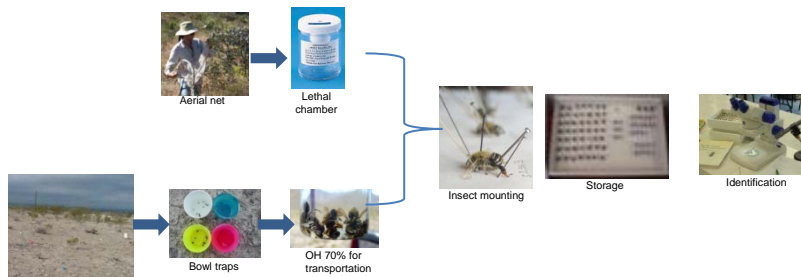
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Native bees are one of the most important insects in any ecosystem, they are responsible for pollination of most flowering plants, have a key position in the trophic chain and some species produce useful products to humans; however, knowledge about native bees in many regions is still poor or totally absent, increasing the growing concern worldwide that many local populations could be disappearing like *Apis mellifera* in some cases. Knowledge for native bees in Mexico is focused mainly in tropical species from south and central regions, leaving north and eastern region practically unexplored, this is why the main goal of this study is to identify native bees present in the state of Nuevo León, along with the vegetation and plant species they visit.

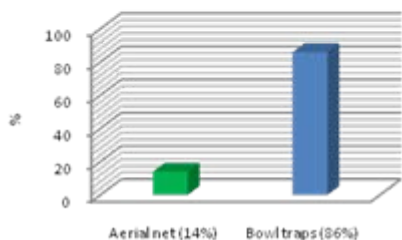
Method



Sampling sites, in Nuevo León, México. A total of 35 localities in 20 municipalities.

Also, methodology was based on bibliographical and data base revision to find historical records for the state, where the web site Discoverlife was very useful, in addition we using their identification keys and The Bee Genera of North and Central America among many other sources.

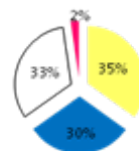
Results



Percentage bees trapped by collection method.

Plant families where the bees were collected by the aerial net method.

Plant Family/ Bee Family	Andrenidae	Apidae	Colletidae	Halictidae	Megachilidae
Asteraceae				X	
Asteraceae	X	X			X
Scrophulariaceae		X			X
Borragnaceae				X	
Cactaceae	X	X		X	X
Convolvaceae		X			
Cruciferae		X			
Euphorbiaceae		X			
Fabaceae	X	X	X	X	X
Menisaceae				X	
Onagraceae				X	
Papaveraceae		X			
Ranunculaceae			X		
Rosaceae	X	X		X	
Rutaceae		X			
Scrophulariaceae	X	X			
Verberaceae		X		X	
Turneraceae		X			
Ugandiniaceae		X			



Bees collected according bowl color (bowl trap method).

*Number of genus and species of bee families found in Nuevo León in base of literature and work of camp.

Families	Genus	Species
Andrenidae	6	51
Apidae	29	80
Colletidae	3	6
Halictidae	13	50
Megachilidae	10	60
Oxaeidae	2	3
Total	63	250

*This number will vary to finish this study.

Bees collected by family and vegetation type including both collect methods

Family bees/ Vegetation Kind	Andrenidae	Apidae	Colletidae	Halictidae	Megachilidae
Forest	69	13	1	95	4
Chaparral	5	5	2	4	3
Desert shrub	354	342	2	1709	48
Riparian forest	0	9	0	6	2
Secondary vegetation	36	460	1	858	76

Conclusions: Preliminary results of this study indicate about 250 species, doubling the number than those reported by Ayala *et al.* (1996), which showed only 100 species. Apidae was de most diverse family, but Halictidae have a mayor presence. The plant families Fabaceae and Asteraceae was the most frequently preferred; vegetation types were bees were most collected were desert shrub and man-induced vegetation.

Acknowledgements



Beemoiting
(Yahoo Group)



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