



UNIVERSIDAD
DE MÁLAGA

11TH WEEC
BUILDING BRIDGES

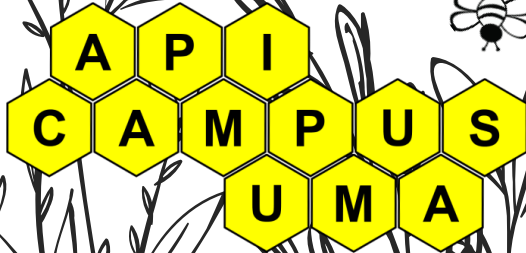
College students' perceptions of bees and the environment

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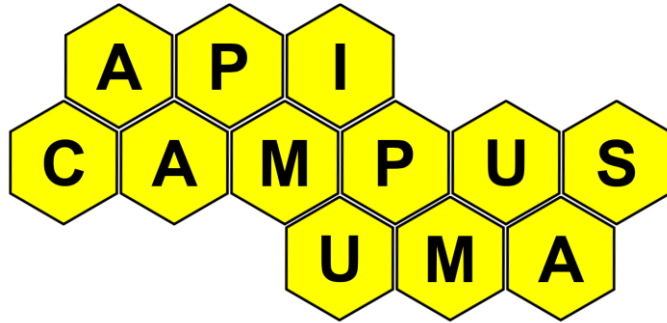
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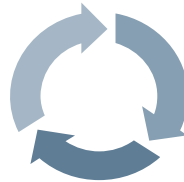
PROJECT



Several branches of knowledge



- Zoology
- Botany
- Medicine
- Pharmacy
- Industrial Design
- Engineering
- and Education



APICAMPUS - Education

- Survey of university students on knowledge and attitudes towards bees.
- Design and experimentation of workshops and other activities.

Survey: Research Questions

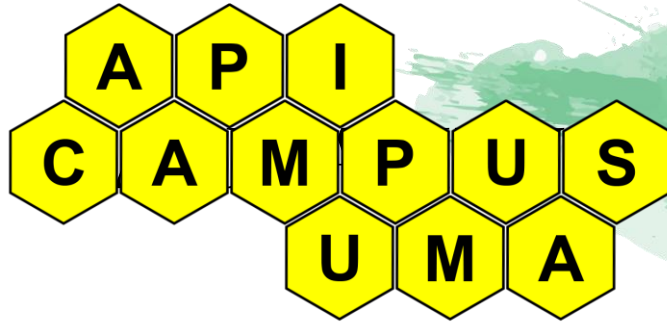


What conceptions do university students have about bees?

Do they know the importance of these insects in the environment and their role in ecosystems?

Is the perception of university students different according to their gender, place of origin (rural or urban) or branch of knowledge?





Educación

Survey: 49 items

$n = 311$

Ciencias, CC. Sociales y Jurídicas e Ingeniería y Arquitectura

60%



40%



33%



77%



Some global results

Item	Mean	Standar Deviation
3. In general, all insects scare me	1.54	1.41
12. The sound of bees scares me	1.71	1.59
13. If I hear the buzzing of a bee I flee	1.78	1.62
14. Bees are insects that I find very friendly	2.88	1.62
17. Bees are important for preserving life on the planet	4.79	0.61
19. The functions performed by bees can be replaced by technology	1.56	1.78
29. The same bee can attack several people in a short period of time.	0.79	1.26



Some global results 2

Item	Mean	Standar Deviation
36. Bees are omnivorous	1.33	1.46
42. I think you would know what to do to preserve the life of the bees	2.75	1.61
49. I would be able to approach a beehive with certain precautions	3.18	1.71
50. I would like to learn how to cultivate with beehives.	2.61	1.82
51. I would join a project, group or association in defense of bees.	2.69	1.68
52. I would be willing to change some behaviors to avoid harming bees.	4.27	0.98



Some results: Genger

Item	Mean	Standar Deviation
3. In general, all insects scare me	M 1.28	1.16
	F 1.73	1.53
12, The sound of bees scares me	M 1.44	1.37
	F 1.90	1.71
13, If I hear the buzzing of a bee I flee	M 1.50	1.42
	F 1.97	1.47
14. Bees are insects that I find very friendly	M 3.21	1.58
	F 2.63	1.61
19. The functions performed by bees can be replaced by technology	M 0.92	0.94
	F 0.66	1.00
27. I have difficulty distinguishing between a wasp and a bee	M 1.03	1.54
	F 1.93	1.85



Some results: Genger 2

Item	Mean	Standar Deviation
29. The same bee can attack several people in a short period of time.	M 0.56	1.13
	F 0.95	1.33
36. Bees are omnivorous	M 1.59	1.44
	F 1.15	1.44
42. I think you would know what to do to preserve the life of the bees	M 3.07	1.51
	F 2.53	1.65
51. I would join a project, group or association in defense of bees.	M 2.34	1.72
	F 2.93	1.62
52. I would be willing to change some behaviors to avoid harming bees.	M 4.12	1.02
	F 4.38	0.92



Some results : Rural & Urban areas

Item	Mean	Standar Deviation
17. Bees are important for preserving life on the planet.	R 4.89 U 4.79	0.37 0,69
49. I would be able to approach a bee hive with certain precautions	R 3.60 U 2.97	1.61 1.73
50. I would like to learn how to cultivate with beehives.	R 3.04 U 2.41	1.81 1.80



Some conclusions



Gender

Women a little more fearful
Men a little more
sympathetic
Women more willing to take
action



Rural / urban areas

Those who come from rural
areas see bees as more
important, are more daring
to approach honeycombs and
are more willing to learn how
to cultivate them.



Branches of knowledge

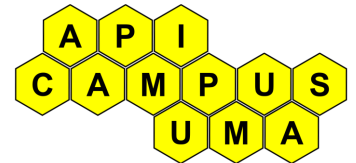
In Social Sciences they are a
little more fearful, in
Sciences more knowledge
and more willingness to act,
in Engineering they trust
more in technology.





**“Working as an interdisciplinary team,
so we can improve bee populations.”**

—APICAMPUS





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Thank you for your attention

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