

Supplementary 2

Manuscript title “Undergraduate Students’ Perceptions of Ladybugs and Social Wasps: The Hidden Roles in Ecosystems”

Table S2. The open-ended responses from participants explaining why they selected the most and least beneficial taxa were categorized into various reasons. Each reason is accompanied by a description, examples of responses, and its corresponding direction (positive or negative).

No	Reason	Answer samples from respondents	Direction	Others
1	Pollination	Bees help pollinating in most flowering plants, Bees provide benefit to agroecosystem.	Positive	
2	Honey	Bees can produce honey; their honey is sweet and delicious.	Positive	
3	Function in ecosystem	Bees provide benefits to human and nature around us, they balance the ecosystem.	Positive	
4	Cool insects	Bees look colorful and attractive	Positive	
5	Benefit to human	Bees are very beneficial to human and nature, we can eat bee hive and drink honey, honey be used as traditional medicine.	Positive	
6	Nothing	No, N/A	Neutral	
7	No function	No benefits for human, they do not provide benefit to ecosystem	Negative	
8	Harm to human	Wasps are very dangerous to human, they bite human, they sting, they are not good for human.	Negative	
9	I do not know	No, N/A	Neutral	
10	Damage crops	They damage agricultural crops,	Negative	
11	Pests	They are insect pests,	Negative	
12	Fear	They are so scary, they look disgusting and annoying, they are not cool animals.	Negative	
13	Predators	They eat other beneficial insects	Negative	