

The Tschinkel Ant Natural History Research Grant supports graduate student research on the scientific natural history and basic biology of ants. The grant encourages projects that consider ants in their social modality, with colonies as functional and developing entities. It is awarded annually to a student whose proposed research promises the best contribution to this oftenneglected field of study.

The winner of the 2021 Tschinkel Grant is **Phoebe A. Koenig**, who will receive \$2,500 to support her research. Phoebe both earned her BS in Entomology and is currently pursuing her MS at Cornell University, where she works in the lab of Dr. Corrie Moreau. Her proposed research is titled, "Investigating an optimal defense hypothesis for ants." Specifically, Phoebe will be investigating how colonies invest into defense, as the costs and benefits of defense shift with colony ontogeny. To do so, she will be measuring venom production in *Temnothorax longispinosus*, and how it relates to colony phenotypic traits including colony size, worker age and worker behavior. Venom is metabolically costly, and therefore should be optimized to fit colony needs and risk. The committee was particularly impressed with the level of detail and consideration that Phoebe put into the proposal. In particular, Phoebe's dedication to the rigorous use of the scientific method to advance our understanding of ant natural history best exemplified the spirit of the Tschinkel Grant.

Sincerely,

The Awards Committee: Sarah Bengston, Kaitlin Baudier (Co-Chairs) Rachelle Adams, Floria Mora-Kepfer Uy, Olav Rueppell, Qian Sun