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SOCIETY FOR INTEGRATIVE AND COMPARATIVE BIOLOGY 2021 VIRTUAL ANNUAL MEETING (VAM) January 3 - Febuary 28, 2021

Meeting Abstract

58-4 Sat Jan 2 **Preference for colored nectar in Phelsuma laticauda** Chiari, Y*; Moreno, N; Roy, R; Kostanecki, A; Brockman, S; Holl, C; Solhaug, EM; Minami, A; Hampton, M; Bee, M; Hegeman, A; Carter, C; George Mason University; George Mason University of Minnesota; Un

Many flowering plants rely on pollinators to spread their pollen. Although insects are the most common pollinators of flowering plants, other animals, including bats and lizards, also perform this role. Depending on their main pollinators, plants may evolve different floral color to attract the pollinators and nectar and pollen to reward them. Among the flowering plants that have nectar, only a few of them have colored nectar, which may also work to attract pollinators. In Mauritius, the flowering plant Nesocodon mauritianus has blood-red nectar - which stands out as a color contrast from its flower – and is pollinated by day geckos belonging to the genus Phelsuma. These flowers are found on vertical cliffs in areas within the distribution of at least one species of Phelsuma day geckos. Previous studies have shown that some Phelsuma geckos prefer red-colored nectar over clear nectar with the same composition. Here we present our results on visitation and feeding of colored vs. non-colored nectar for another species of Phelsuma, P. laticauda - which does not occur in the same environment as N. mauritianus. Our results indicate a clear preference in terms of visitation and feeding for the colored nectar suggesting that preference for red-colored nectar may be widespread in the genus Phelsuma.