Spot the Predator

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Because of the recent Spotted Lanternfly outbreak of September 2014, in the United States' Mid-East, an indirectly concerning threat has been posed on the sustainability of traditional environments as they are known. With this problem continuing on the rise, as Spotted Lanternflies begin to diminish the fruitful quality of native trees, the question of how the insect can be detached from the western hemisphere is raised: Do Spotted Lanternflies have natural predator(s)? In order to answer this question, this experiment was created to analyze the aggression level of native invertebrates that could potentially be used in large numbers to target the Spotted Lanternfly population. To begin, potential predators, Spotted Lanternflies, and Spotted Lanternfly Egg Masses were gathered. Once obtained, each potential predator was put in an observation chamber with a Spotted Lanternfly for aggression consideration based upon the created "Aggression Scale Analysis Chart". This same process was carried out to additionally determine the aggression of potential predators towards egg masses. In the end, the results showed that the greatest, and therefore, most Spotted Lanternfly-threatening species were the Praying Mantis and Yellow Jacket. Considering the results on a broad scheme, the found aggression results made sense, in perspective of predictions, but were much more differentiated than anticipated. Looking forward, the fact that Pray Mantises and Yellow Jackets show aggression towards Spotted Lanternflies possibly offers that the hypothetical mass-breeding of either two of the species could create a native force against the invasion of the Spotted Lanternfly.

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