THE ROLE OF GENETICS AND CUTICULAR HYDROCARBONS IN ARGENTIVE ANT AGGRESSION

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Invasive species are a severe and increasingly serious problem for economies and ecosystems worldwide. The Argentine ant (*Linepithema humile)* is one of the most widespread and damaging invasive species. In this research proposal we present three studies that will illuminate the mechanisms underlying the impact and spread of introduced Argentine ant populations. The results of this research will promote the development of new tools for combating this pest of homes, businesses, agriculture and natural ecosystems. Specifically, we will identify the genetic and biochemical basis for colony-specific recognition behavior, and will develop and test new substances designed to break down the widespread, high-density "supercolonies" that characterize introduced Argentine ant populations.