

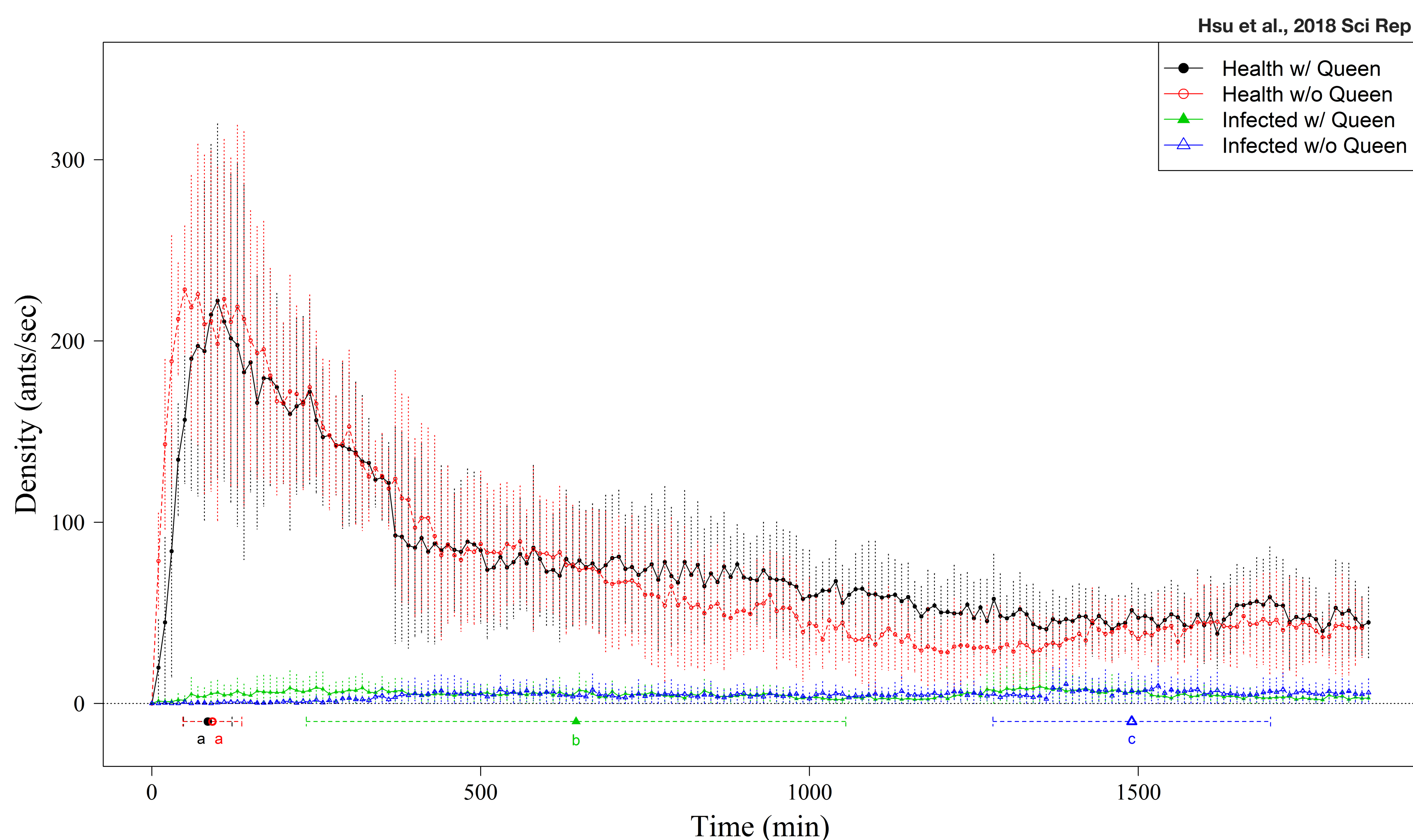
Virus and fire ant monitoring



FIRE ANT AND THEIR UNHEALTHY DIETS

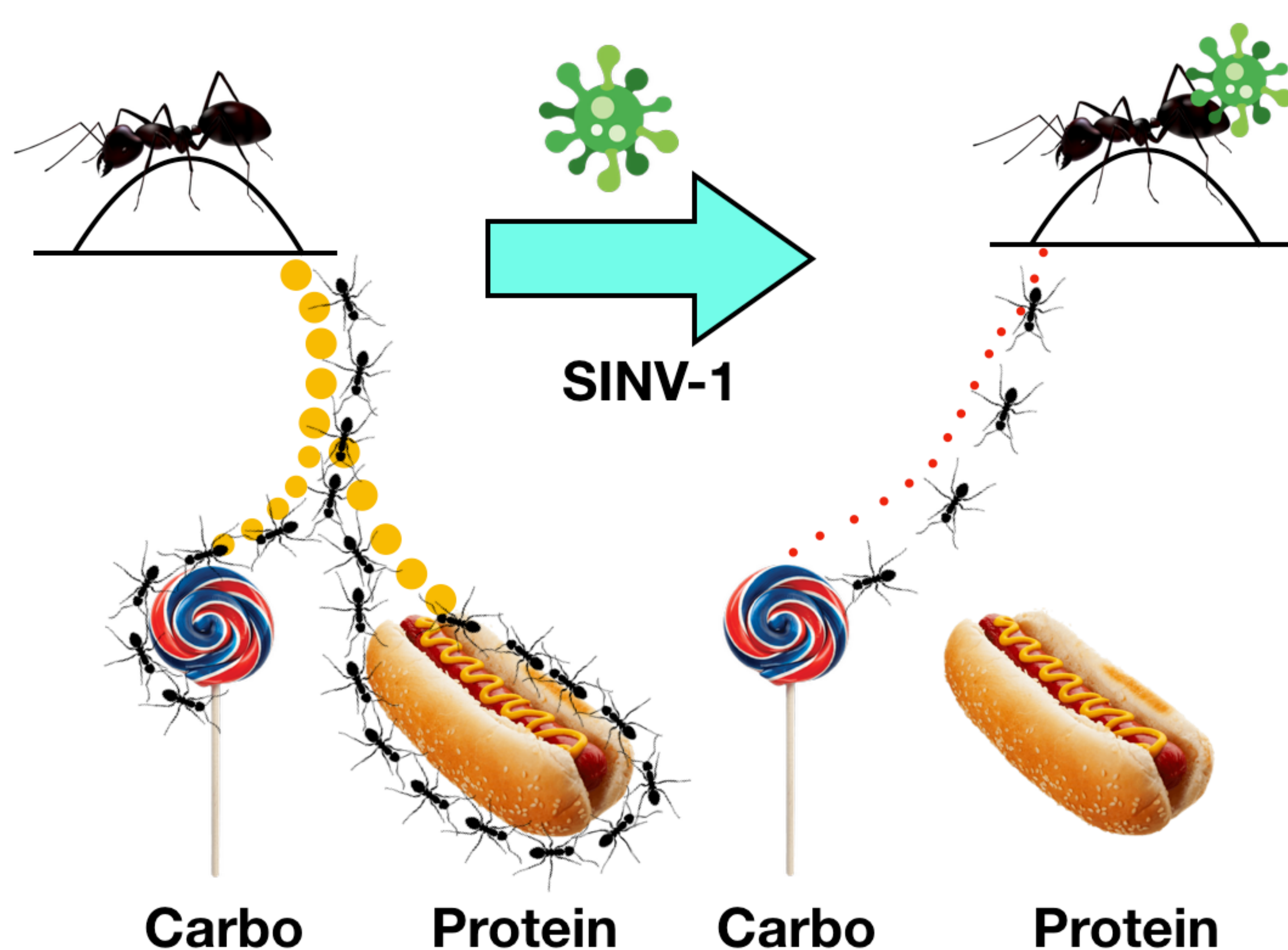
Fire ants are known to love oily foods. Hence hot dog slices, tuna or potato chips are commonly used as food lures in monitoring programs in the United States, Australia, and Taiwan.

However, caution needs to be taken when it comes to viral infection.....



THE EFFECT OF VIRAL INFECTION

Foraging activities and time for peak recruitment of uninfected (red & black) and SINV-1 infected (green & blue) colony fragments. The open symbols denote colony fragments with the presence of queen, whereas the closed ones denote those with the absence of queen.



VIRUS INDUCED BEHAVIORAL CHANGES

Virus-infected fire ants display reduced foraging performance, decline in lipid intake and shift in dietary preference to carbohydrate-rich foods.

Management implications

1. Conventional food lures may result in underestimating actual ant numbers
2. We are currently identifying biochemical substances capable of recusing the ant's foraging behaviors