

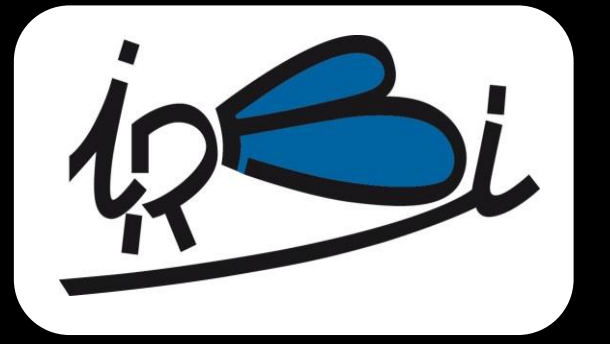
Predator's odor influences aggressive behavior of *Reticulitermes* termites in competition tests



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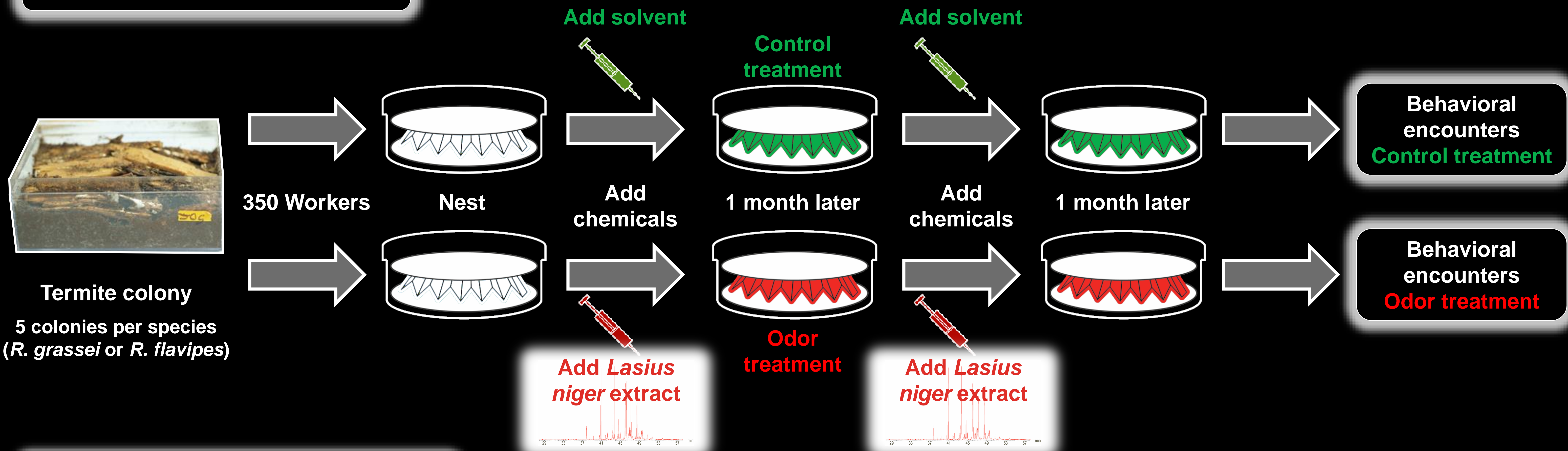
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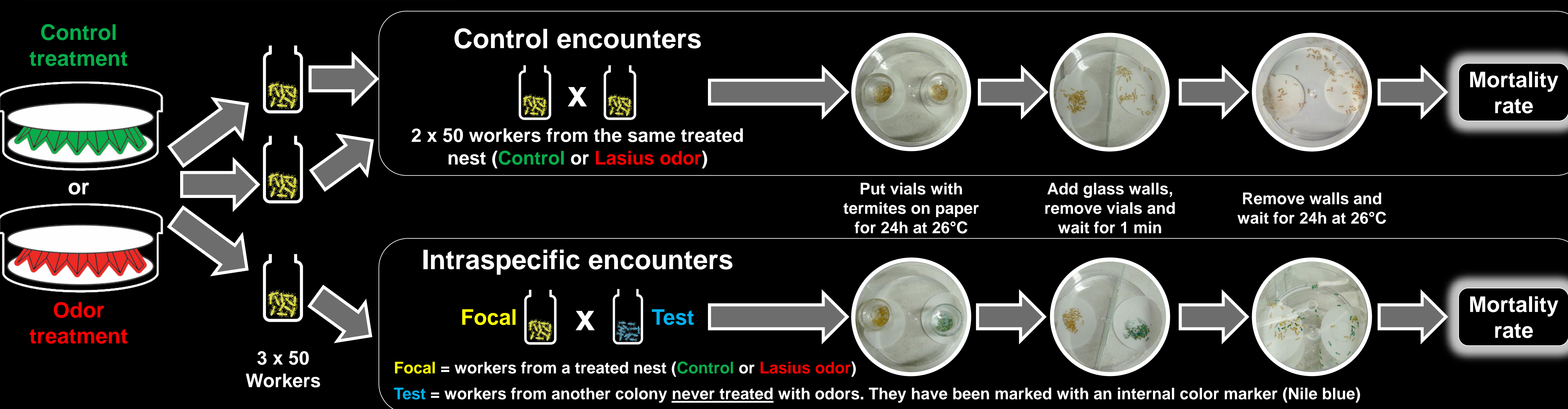


Hydrocarbon compounds (CHCs) are well known to be involved in numerous communication processes in insects and are particularly involved in the recognition and organization of social insects. The presence of CHCs in near environment are clues potentially used to assess predators or competitors. We investigated to know if the presence of a predator's odor (*Lasius niger*) influenced several traits like caste ratios, foraging strategies, chemical signatures and mortality rates of two species of termites (*Reticulitermes flavipes* and *R. grassei*). Here we present only parts of the results on the mortality rates.

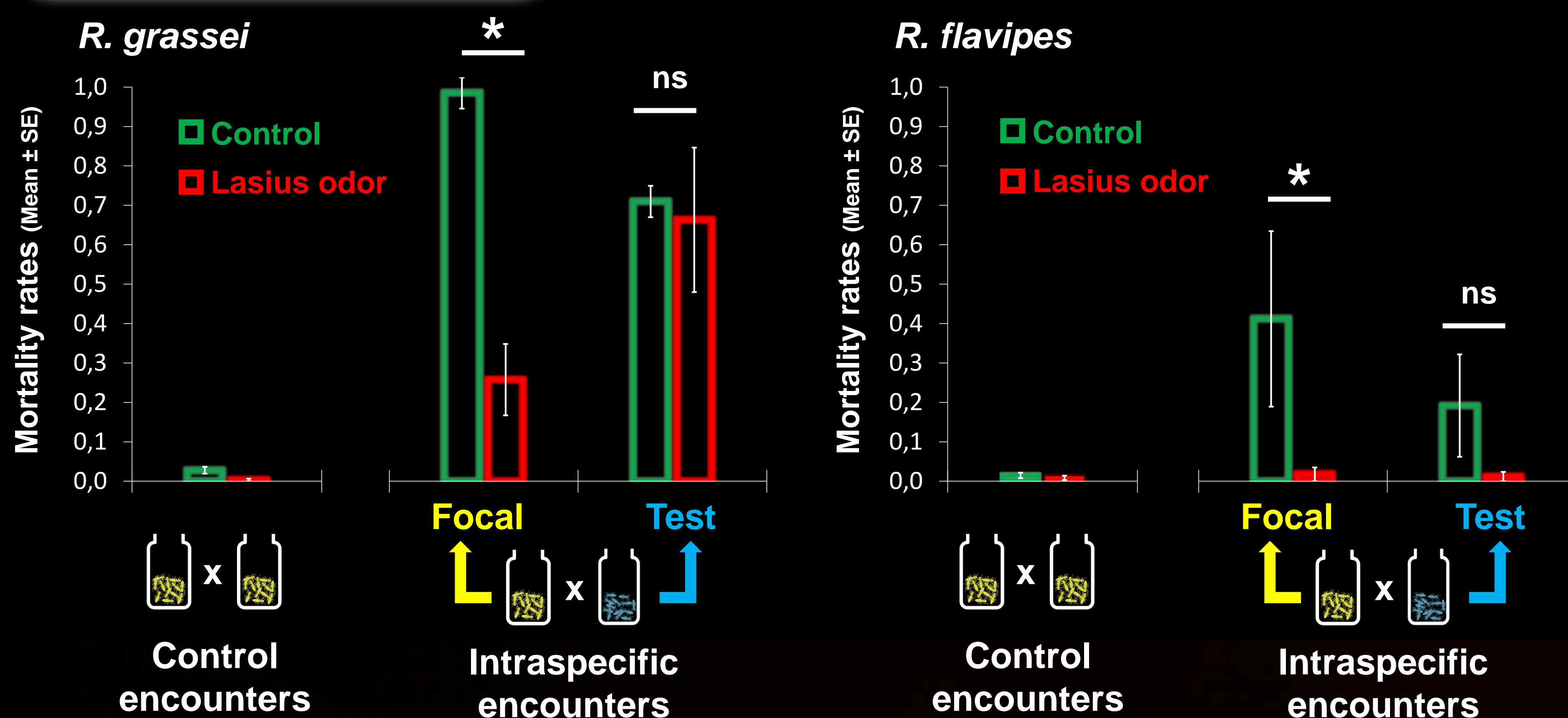
Chemical exposure



Behavioral encounters



Mortality rates



Control encounters show low mortality.

Treatments (Control or Lasius odor) induced the same behavioral answers for both species, but *R. grassei* seems more aggressive than *R. flavipes*.

The mortality of "Focal" individuals decreased in presence of the Lasius odor compared with the Control for both species.

"Test" individuals showed similar mortality during encounters with "Focal" individuals whatever the treatment (Control or Lasius odor).

The presence of the hydrocarbon extracts of *Lasius niger* in the near environment seems to induce an increase of these termites' aggressive behavior.

