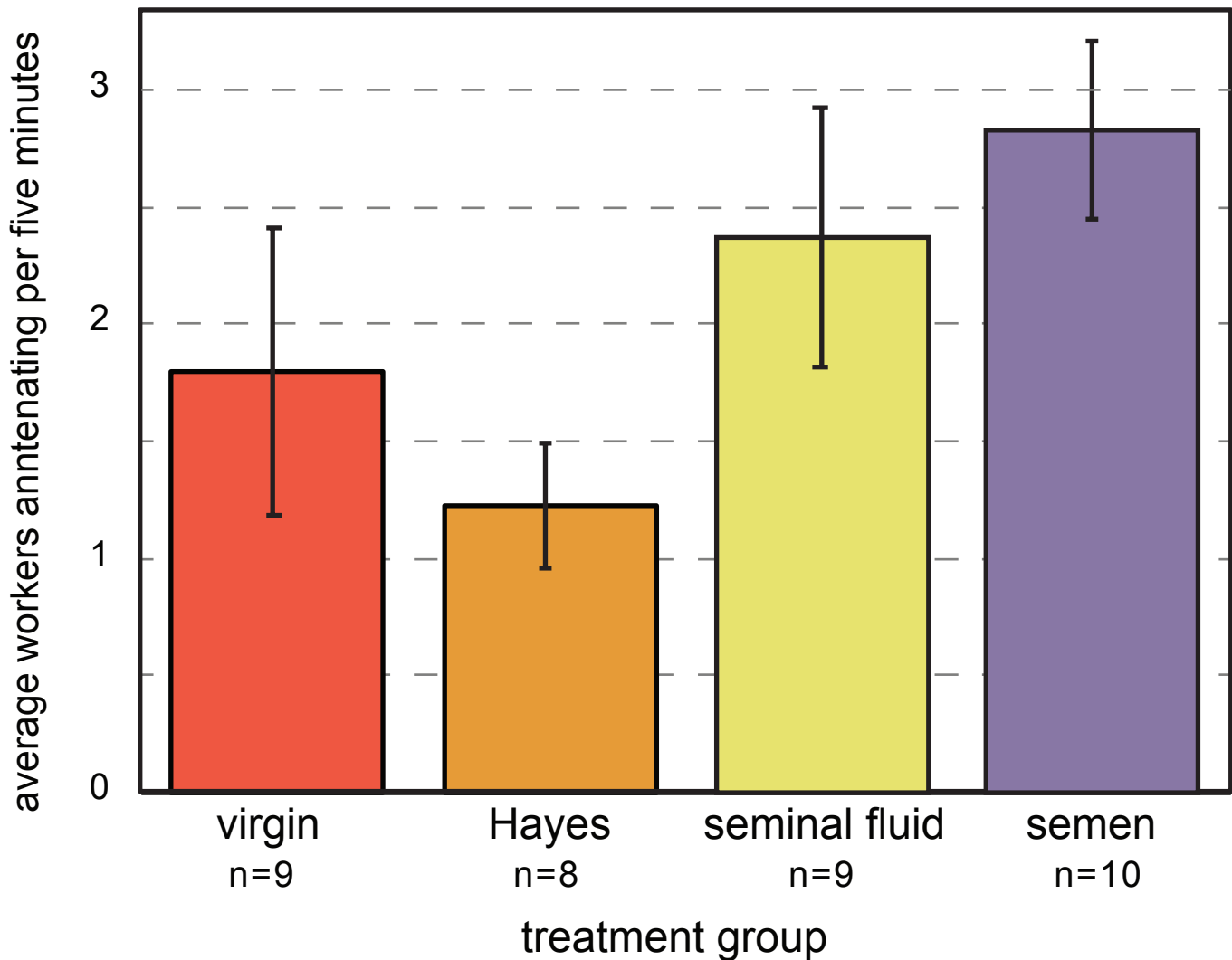


worker retinue response assay



Supplemental Figure S3. Worker retinue response assay. Workers tended to be more attracted to both seminal fluid- and semen-injected queens than Hayes-injected queens, but this was not significant for SF queens (Repeated measures ANOVA followed by post-hoc Pairwise t-tests; Bonferroni adj. p-values=0.106, 0.042). However, upon excluding virgins from analysis, there is a significant difference between SF and SE queens as compared to HS queens (Repeated measures ANOVA followed by post-hoc Pairwise t-tests; Bonferroni adj. p-values=0.049, 0.019). Error bars represent standard error of the mean.

1 **Injection of seminal fluid into the hemocoels of honey bee queens (*Apis mellifera*)**
2 **can stimulate post-mating changes**
3
4

5 W. Cameron Jasper^{1†}, Laura M. Brutscher^{1†}, Christina M. Grozinger² and Elina L. Niño^{1*}
6

7 ¹ Department of Entomology and Nematology, University of California Davis, One Shields Ave,
8 Davis, CA 95616, USA
9

10 ² Department of Entomology, Center for Pollinator Research, Huck Institutes of the Life
11 Sciences, Pennsylvania State University, University Park, 16802, PA, USA
12

13 [†] Co-first authors
14

15 * Corresponding author

16 Address: Department of Entomology and Nematology, University of California, 1 Shields
17 Avenue, Davis, California, 95616

18 Telephone: 530-500-2747

19 Fax: 530-752-1537

20 Email: elnino@ucdavis.edu
21
22