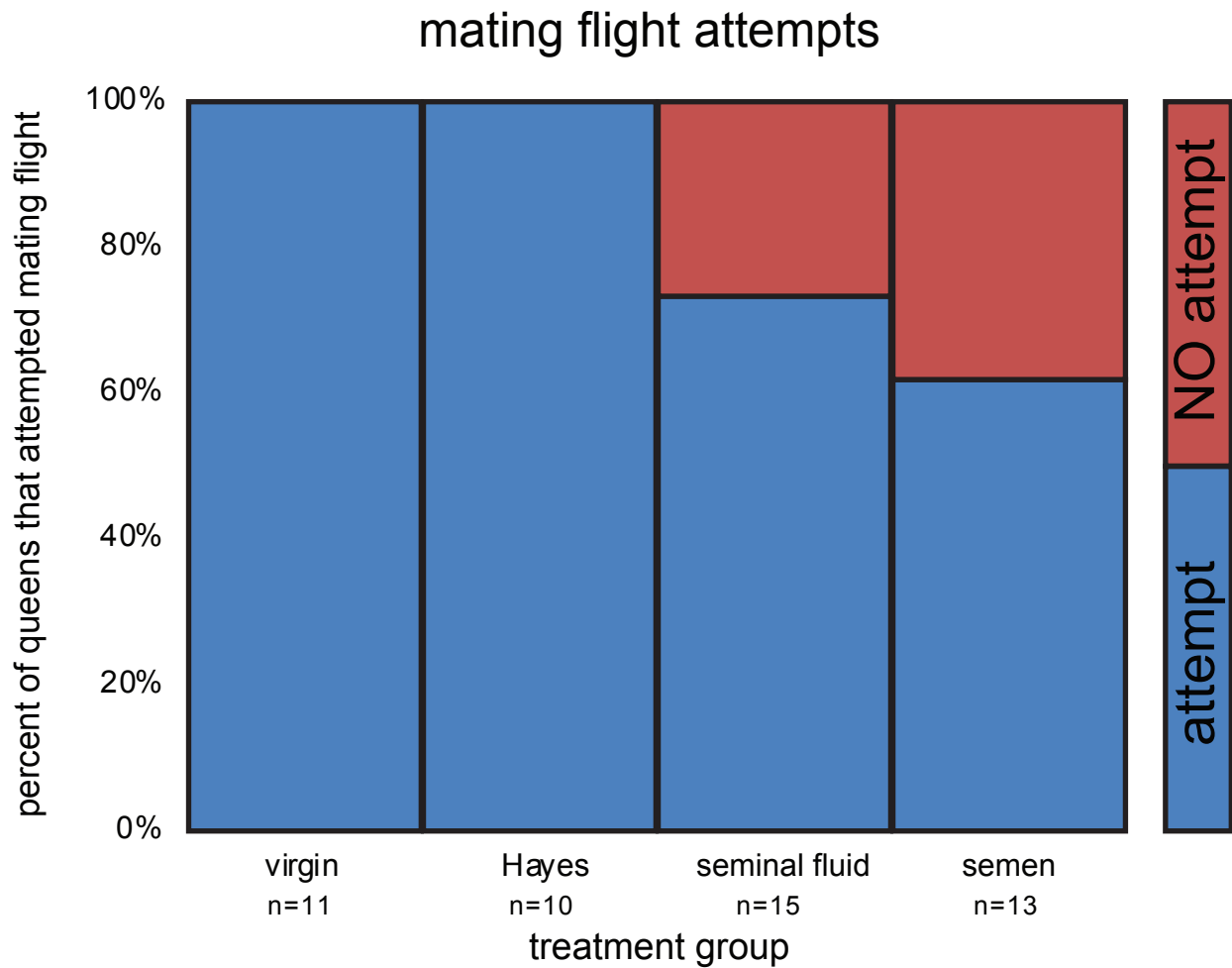




Supplemental Figure S2. Queen Mating Flight Attempts (sexual receptivity). Queens injected with semen or seminal fluid (grouped) have reduced sexual receptivity compared to virgin queens and queens injected with Hayes (grouped) (chi-square (Pearson) = 8 χ^2 = 19.61, df=1, P = 9.486e-06). Blue represents queens that attempted a mating flight and red represents queens that did not attempt a mating flight.

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

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