## Hygienic behaviour in honeybees: a comparison of two recording methods and estimation

of genetic parameters - Apidologie

Elena Facchini<sup>1\*</sup>, Piter Bijma<sup>2</sup>, Giulio Pagnacco<sup>1</sup>, Rita Rizzi<sup>1</sup>, Evert Willem Brascamp<sup>2</sup>

<sup>1</sup>Department of Veterinary Medicine, University of Milano, via G. Celoria 10, 20133, Milan, Italy.

<sup>2</sup>Wageningen University & Research, Animal Breeding and Genomics, PO Box 338, 6700AH, Wageningen, The Netherlands \*corresponding author: <u>elena.facchini@unimi.it</u>

Elena Facchini

Department of Veterinary Medicine,

University of Milano,

Via G. Celoria 10,

20133 - Milano

Italia

**Figure S1**. Step by step illustrated procedure of FKB\*. 1: find suitable capped brood area, preferably on both sides of the brood comb and choose an optimal area where capped brood are preponderant, place the metal tube over the brood; 2: keep track of the original position of the brood disc by marking the brood with a water based ink marker both inside and outside the tube; 3: twist the tube in the brood and pass through the comb to cut out the brood disc; 4: extract the tube; 5: example of a 3d printed piston, in alternative a plastic glass can be used; 6: use a piston to pull out the brood disc from the tube; 7: dip the brood in liquid nitrogen kept in the insulated box; 8: after ca. 2-3 minutes fish out the brood disc in the comb; 11: make sure to place the brood disc in the original position with the aid of the markers; 12: take pictures right after the test (time 0) and after 24 hours (time 24) to estimate

