**Behavioural data:**

1. nest: identifier for independent nests (e.g. nest-id).
2. date: date on which the behaviours were recorded.
3. observation: indicates the round of observations. 1= observation two days before injection, 2= observation one days before injection, 3 observation short before injection, 4= observation 2 hours after injection, 5= observation one day after injection, 6= observation two days after injection.
4. timepoint: indicates whether the observation took place either “before” the injection or “after” the injection of control/spore solution.
5. nest.initiation: date on which the nest was initiated by the foundress
6. age: age of the nest (=number of days from nest initiation to observation date).
7. injection: treatment group, “t” stands for aspergillus spore-buffer treatment, “c” stands for blank-buffer control.
8. n.pupae: number of visible pupae.
9. n.larvae: number of visible larvae.
10. n.females: number of visible females.
11. n.males: number of visible males.
12. l.resting: times larvae were observed to be not moving.
13. l.walking: times larvae were observed to crawl with clear directionality.
14. l.allogrooming: times larvae were observed to allogroom.
15. l.digging: times larvae were observed to dig.
16. l.cannibalism: times larvae were observed to feed on the corpse of a nestmate.
17. l.balling: times larvae were observed to form frass/faeces balls.
18. m.resting: times males were observed to be not moving.
19. m.walking: times males were observed to crawl with clear directionality.
20. m.cropping: times males were observed to feed on the fungus garden.
21. m.allogrooming: times males were observed to allogroom.
22. m.shuffling: times males were observed to shuffle loose material.
23. m.digging: times males were observed to dig new tunnels.
24. m.cannibalism: times males were observed to feed on the corpse of a nestmate.
25. m.autogroom: times males were observed to groom themselves.
26. m.mating: times males were observed to copulate with a nestmate.
27. f.resting: times females were observed to be not moving.
28. f.walking: times females were observed to crawl with clear directionality.
29. f.cropping: times females were observed to feed on the fungus garden.
30. f.allogrooming: times females were observed to allogroom.
31. f.shuffling: times females were observed to shuffle loose material.
32. f.digging: times females were observed to dig new tunnels.
33. f.blocking: times females were observed to block the entrance tunnel with their body.
34. f.cannibalism: times females were observed to allogroom.
35. f.autogrooming: times females were observed to feed on the corpse of a nestmate.

Note: every entry contains the pooled behaviours of 5 repeated scans of the same nest. For instance would a 5 under the category “f.blocking” thus signify that the entrance tunnel was permanently blocked during our observation since only one female performs blocking at a time. Numbers of visible individuals can vary between these 5 repeated scans due to the existence of nest parts that are not visible from outside. Thus, the individual numbers recorded represent the maximal number of individuals of a certain category that were visible over all the 5 repeated scans.
Mating was recorded as a behaviour for males only because females usually perform other tasks like allogrooming while the male copulates with them.

**Dispersal data:**

1. date: date on which the number of dispersing females was counted
2. injection: treatment group, “t” stands for aspergillus-spore-buffer treatment, “c” stands for blank buffer control
3. timepoint: indicates whether the day of counting was either “before” the injection or “after” the injection of control/spore solution. “injectionday” indicates the dispersing females counted on the day of the injections.
4. censoring.variable: Used for determination of censorings in the analysis. It indicates whether the measurement represents either a count of dispersing beetles (“1”) or a count of the individuals remaining in the nest after termination of the experiment (“0”, destructive removal of all individuals in the nest).
5. nest: identifier for independent nests (e.g. nest-id).
6. disperser: number of dispersers counted (censoring data: number of individuals that remained in the nest and did not yet disperse).
7. day: day on which counting took place, relative to the day of injection. Negative numbers indicate days before the injection, positive numbers indicate days after the injection. “0” indicates the day on which the injections took place.

Note: NA on days where beetle dispersal was not counted for a certain nest.

**Fungus data:**

1. nest: identifier for independent nests (e.g. nest-id).
2. beetles: part of the nest where beetles were removed (“without”) or left inside (“with”).
3. injection: indicates whether aspergillus spore solution (“t”) or the blank control (“c”) solution was injected into the nest.
4. Aspergillus: colony forming unit counts for *Aspergillus* sp. in 1/10 dilution.
5. Penicillium: colony forming unit counts for *Penicillium* sp. in 1/10 dilution.
6. Ophiostoma: colony forming unit counts for *Penicillium* sp. in 1/10 dilution.

Note: NA whenever differentiation of a certain fungus was not possible with high confidence.