**Table S3**

Number of *dubia* roaches tested in Experiment 2 and Experiment 3 as a function of sex, group size and cue location. In Experiment 2, we used chemical cues from other *dubia* roaches. In Experiment 3, we used chemical cues from a different species, the death’s head cockroach, *Blaberus craniifer*. In both experiments, each animal was tested once for a total of 512 observations.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Sex | Group Size | Chemical cue location | |
|  |  |  | Lighter shelter | Darker shelter |
| Experiment 2 | Female | 1 | 32 | 32 |
|  |  | 3 | 96 | 96 |
|  | Male | 1 | 32 | 32 |
|  |  | 3 | 96 | 96 |
| Experiment 3 | Female | 1 | 32 | 32 |
|  |  | 3 | 96 | 96 |
|  | Male | 1 | 32 | 32 |
|  |  | 3 | 96 | 96 |