

**SUPPORTING FILE**



**Plastic container with 100 L water and 3.5 kg of *Brachiaria* straw**



**Soaked straw with 0.5%  $\text{Ca}(\text{OH})_2$**



**Substrate draining in plastic box**



**Plastic bags with substrate and 2% (w/w) spawn (sorghum seeds)**



**A:** General arrangement of blocks during cultivation. **B:** Approximate view of the blocks with the presence of fly larvae (indicated by red arrow). **C:** Samples of adults and larvae collected during the crop, left: three adult males (prominent claspers on the end of their abdomen that are used in mating) and right: a female with the abdomen swollen with eggs. In the background, it is possible to visualize hundreds of larvae with white coloration and dark head.