

Supplementary Material

The following figures provide additional pictures of the histological preparations of termites exposed with *Metarhizium anisopliae*.

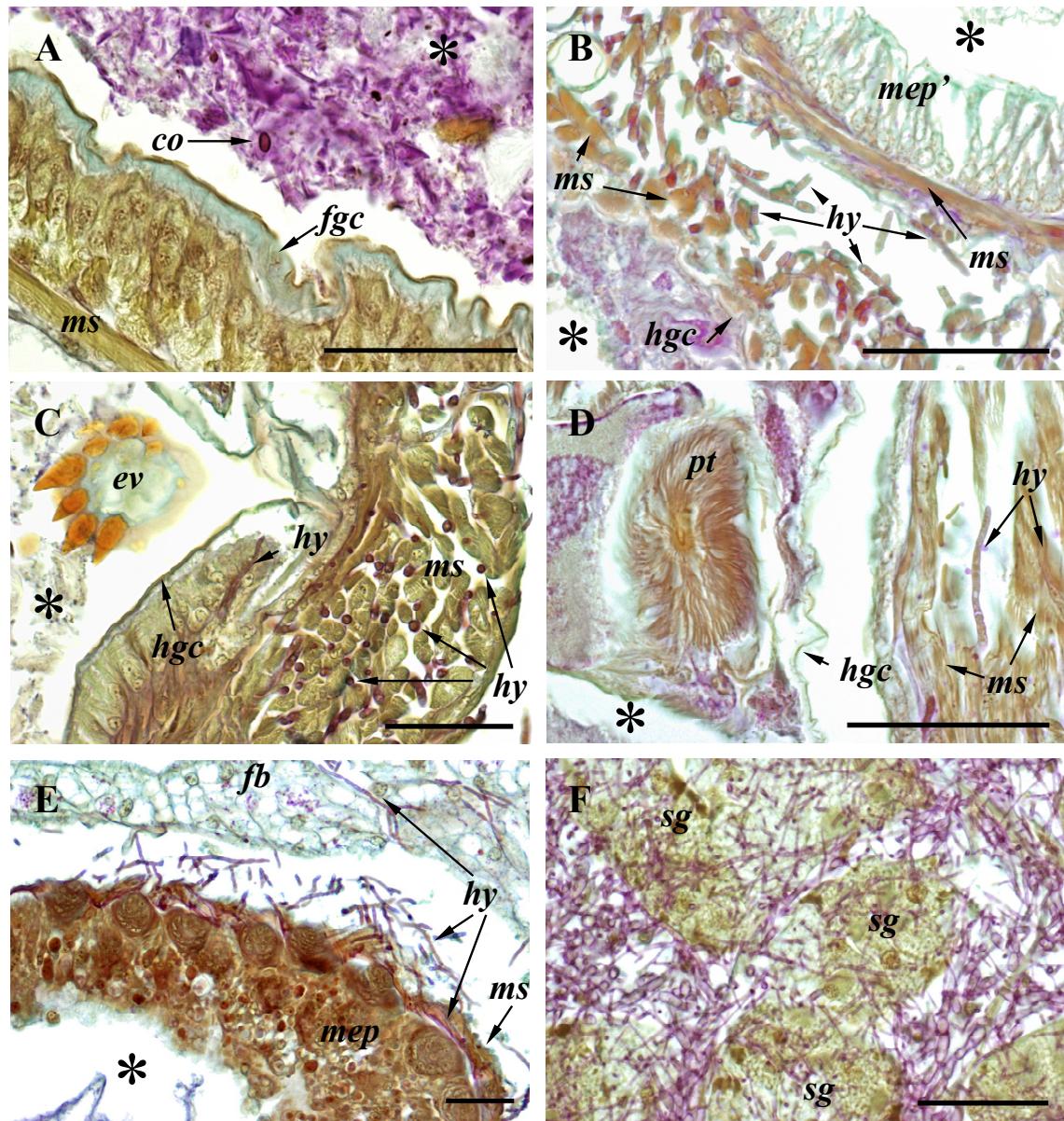
S-Figure 1. Histological preparation of *Hodotermopsis sjoestedti*.

S-Figure 2. Histological preparation of *Hodotermes mossambicus*.

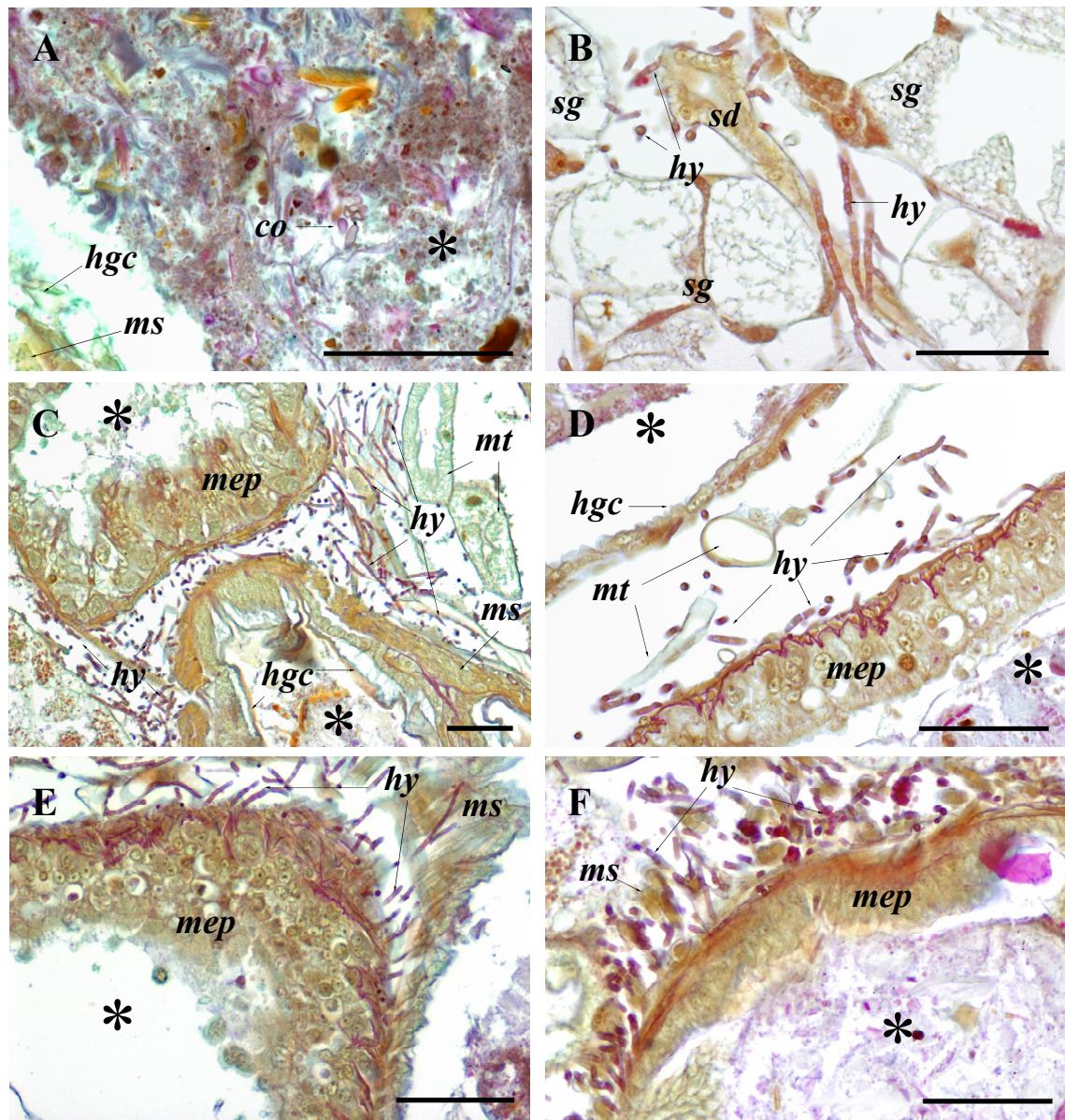
S-Figure 3. Histological preparation of *Kalotermes flavicolis*.

S-Figure 4. Histological preparation of *Prorhinotermes canalifrons*.

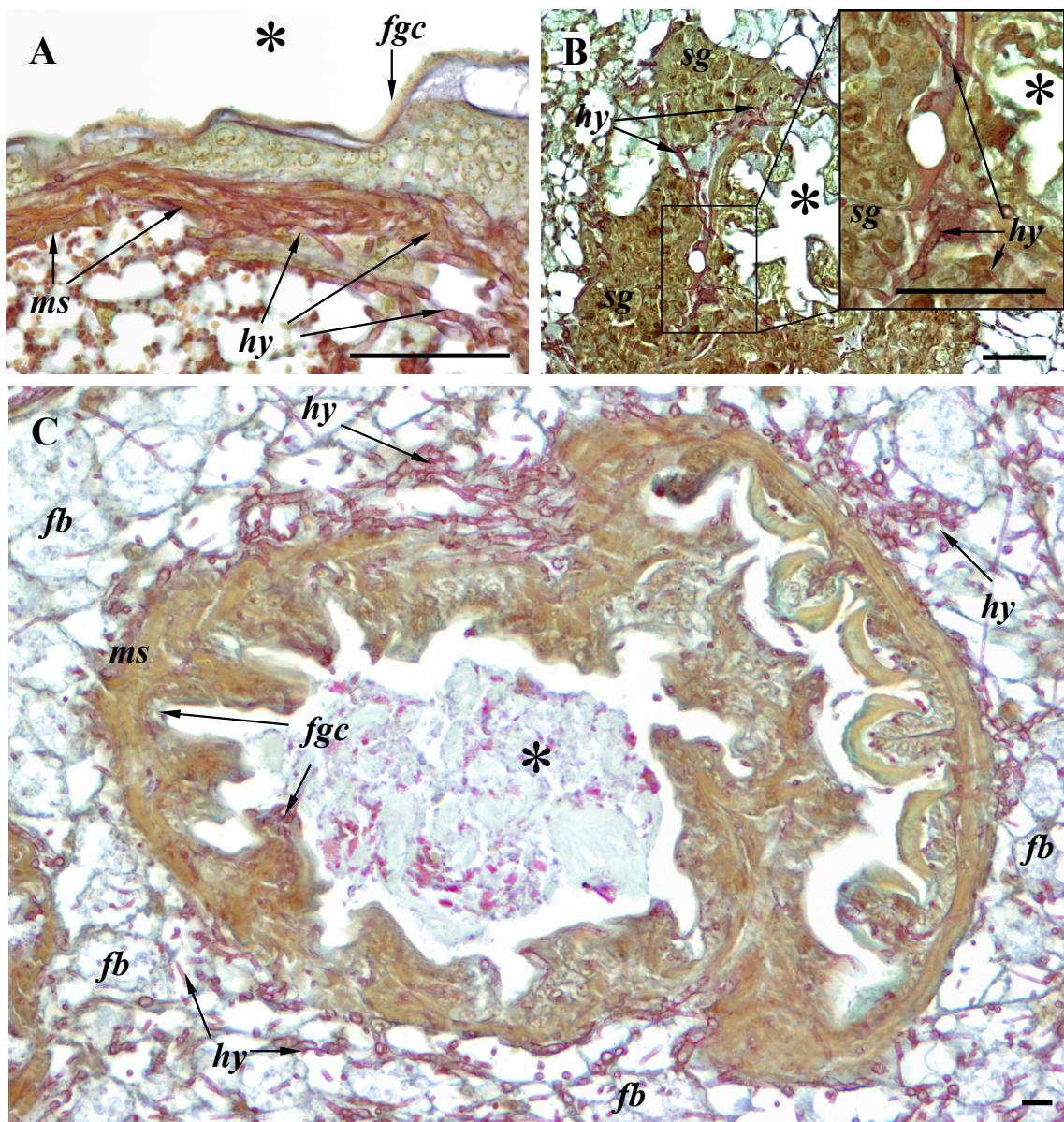
S-Figure 5. Histological preparation of *Nasutitermes voeltzkowi*.



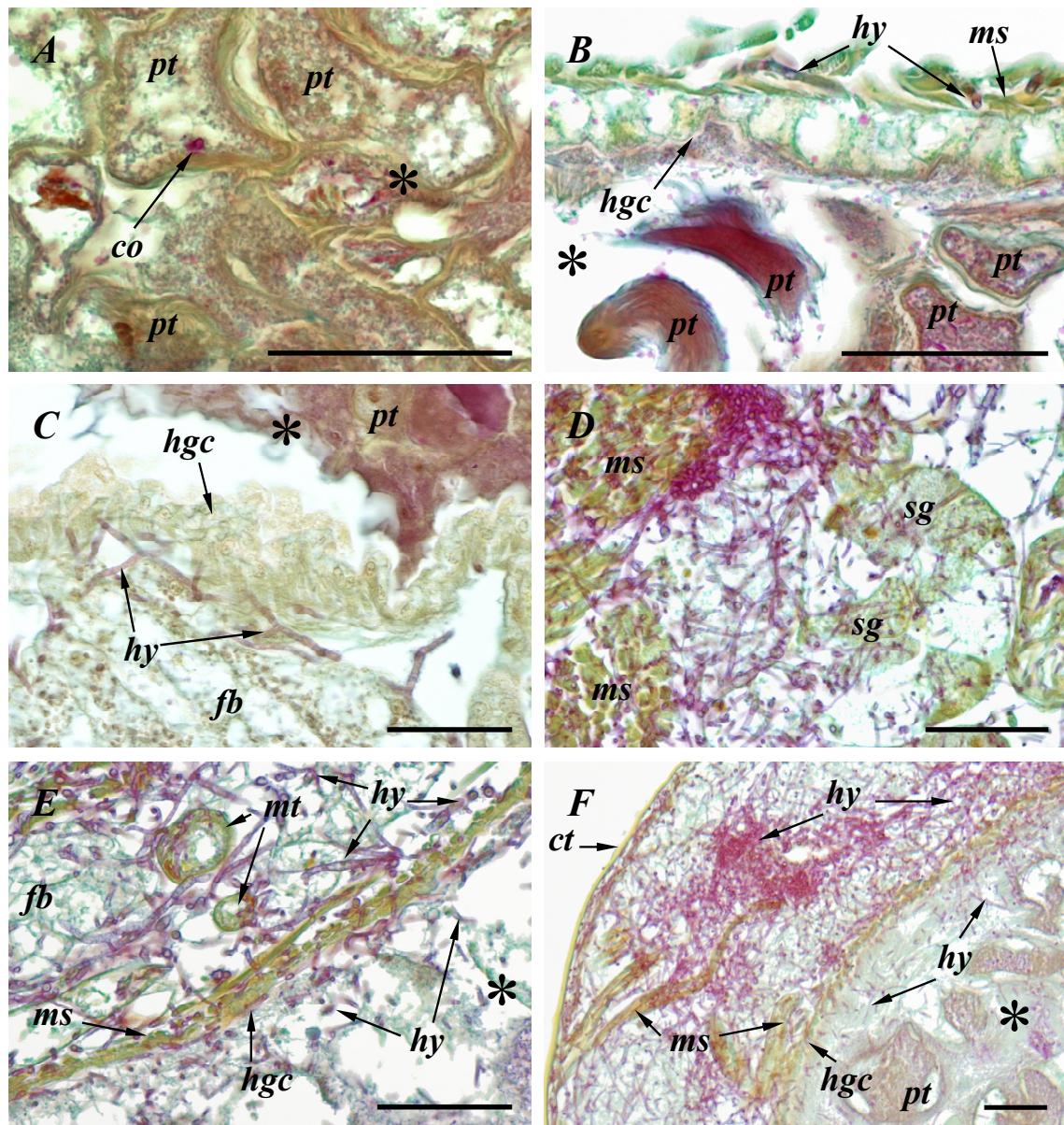
S-Figure 1. Occurrence of *Metarhizium anisopliae* in *Hodotermopsis sjoesestedti*. A) Presence of an ungerminated conidia in the lumen of the foregut, mixed with food particles, 4 days after exposure. B-E) Penetration of hyphae around the hindgut and the midgut muscles of specimens fixed at 1d and 2d *post mortem*, absence of hyphae in the lumen. F) Invasion of the salivary glands at 2 d *post mortem*. *ct* = cuticle, *ev* = enteric valve, *fb* = fat body, *hgc* = hindgut cuticle, *hy* = hyphae, *mep* = midgut epithelium, *mep'* = malpighian tubules insertion, *mt* = malpighian tubule, *ms* = muscle, *pt* = protozoan, *sg* = salivary gland, * = gut lumen. The scale bars represent 50 μ m.



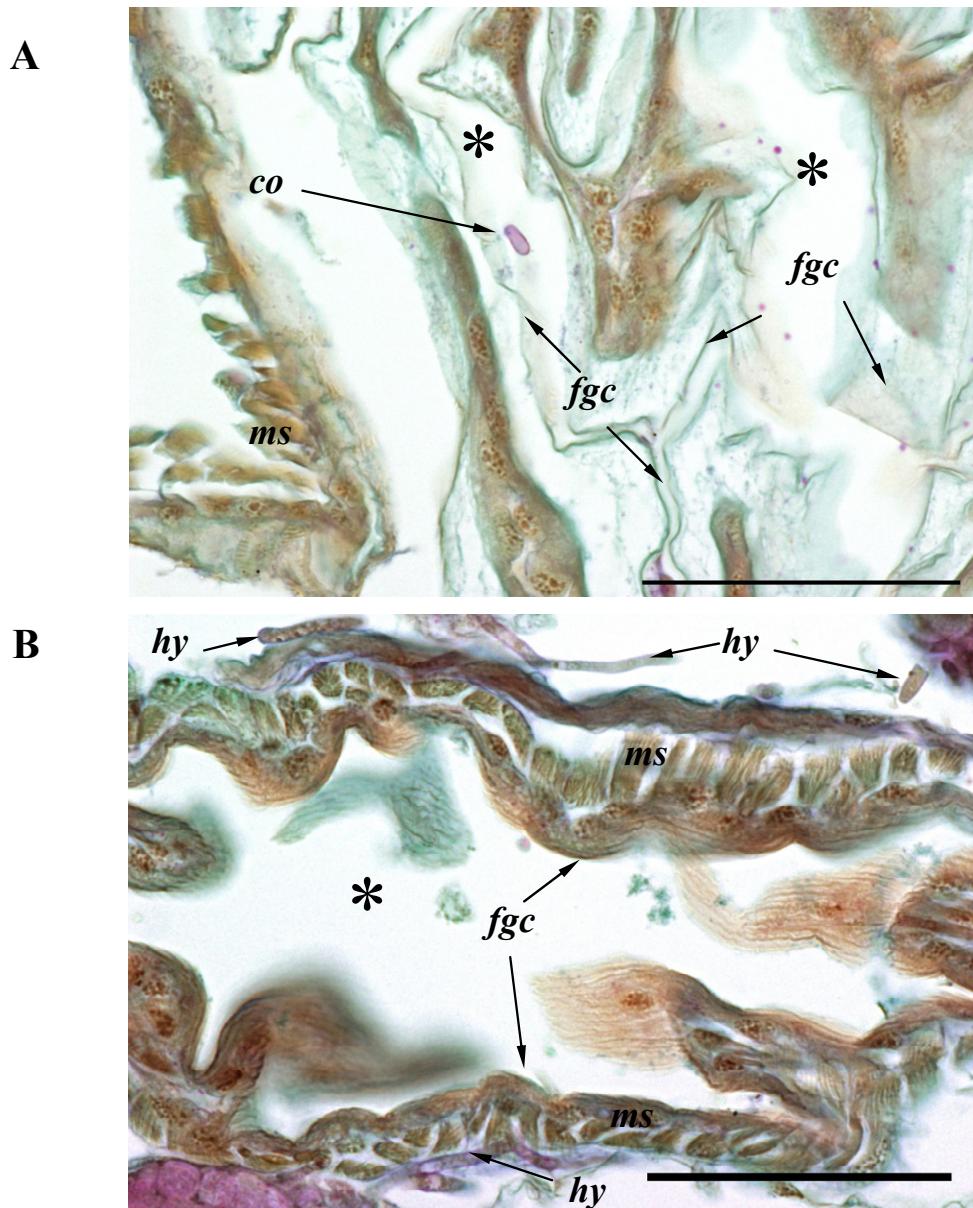
S-Figure 2. Occurrence of *Metarhizium anisopliae* in *Hodotermes mossambicus*. A) Presence of conidia in the paunch of a healthy 5 d after inoculation. B) Penetration of hyphae in the salivary glands in a dead termite 1 d post mortem. C) Invasion of the fungal filament in muscles around the midgut and ileum just after the death of the termite. D-F) Penetration of hyphae around the midgut and hindgut 2 d post mortem, muscles around the gut are invaded but the lumen remains hyphal-free. co = conidia, ct = cuticle, fb = fat body, fgc = foregut cuticle, hgc = hindgut cuticle, hy = hyphae, , mep = midgut epithelium, mt = malpighian tubule, ms = muscle, pt = protozoan, sd = salivary duct, sg = salivary gland, * = gut lumen. The scale bars represent 50 μm .



S-Figure 3. Occurrence of *Metarhizium anisopliae* in *Kalotermes flavicollis*. A) Accumulation of hyphae around the crop but no penetration into the foregut lumen of a termite at 1 d post mortem. B) Penetration of the fungal filament into the salivary glands but not into the foregut in a termite at 1 d post mortem. C) Invasion of hyphae in the fat body, but the foregut lumen remains hyphae-free at 2 d post mortem. bl = basal lamina, ct = cuticle, fgc = foregut cuticle, hy = hyphae, mep = midgut epithelium, ms = muscle, sg = salivary gland, * = gut lumen. The scale bars represent 50 μm .



S-Figure 4. Occurrence of *Metarhizium anisopliae* in *Prorhinotermes canalifrons*. A) Presence of a fragment of a conidium in the paunch of a healthy termite, apparently phagocytized by a protozoan 5 d after exposure. B-C) Invasion of hyphae into hindgut muscles just after the death of the termite, but no penetration into the hindgut. D) Invasion of the salivary glands at 1 d post mortem. E-F) Hyphal penetration of the hindgut lumen after 2 d post mortem. co = conidia, ct = cuticle, fb = fat body, hgc = hindgut cuticle, hy = hyphae, mt = malpighian tubule, ms = muscle, pt = protozoan, sg = salivary gland, * = gut lumen. The scale bars represent 50 µm.



S-Figure 5. Occurrence of *Metarhizium anisopliae* in *Nasutitermes voeltzkowi*. A) Presence of a conidium in the cuticular foldings of the crop (foregut) 3 d after exposure in a healthy individual. B) Presence of Hyphae in the hemocoel and in the muscles around the digestive tract (foregut) just after the death of the termite, no mycosis in the gut lumen. *co* = conidia, *fgc* = foregut cuticle, *ms* = muscle, * = gut lumen. The scale bars represent 50 μ m.