

Figure 1-figure supplement 1

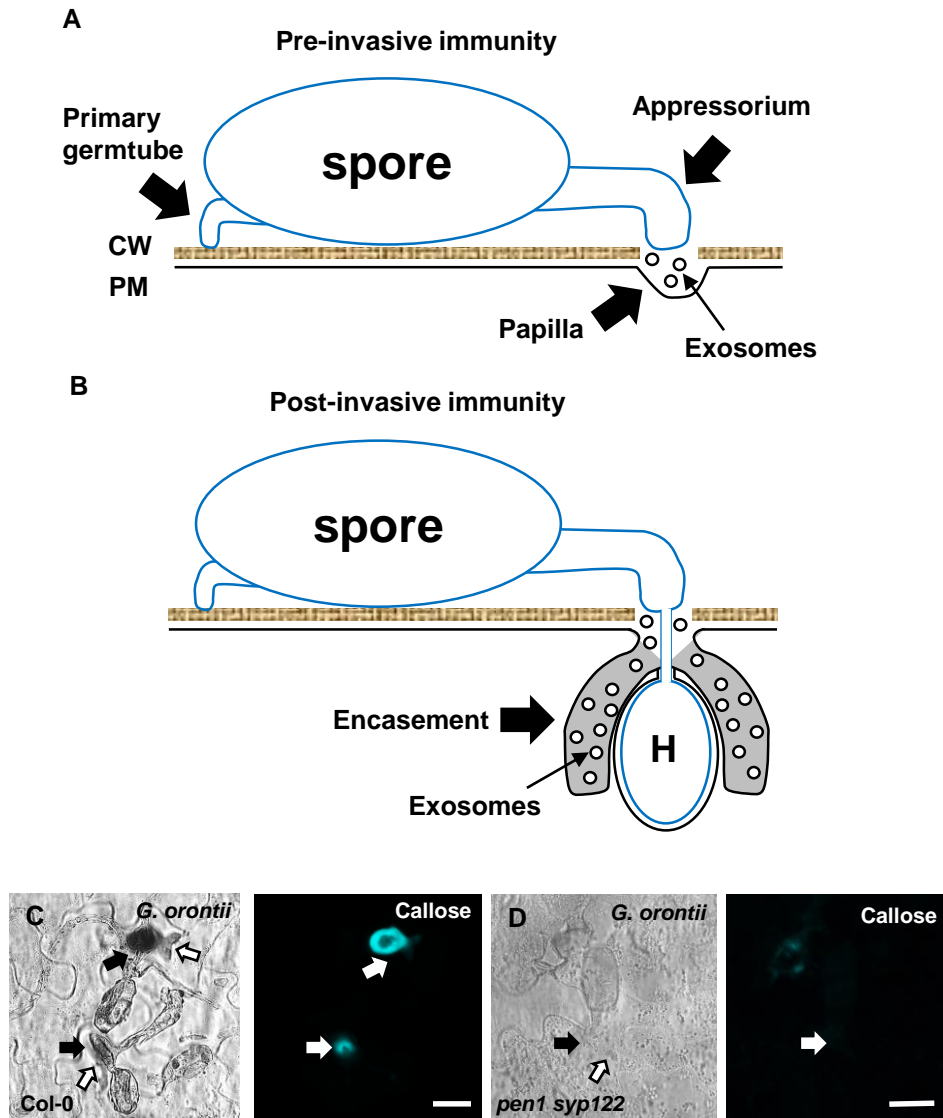


Figure 1-figure supplement 1. Pre- and post-invasive immunity. (A) Attack by non-adapted filamentous pathogens such as *Bgh* on *Arabidopsis*, is met by a localized apposition (papilla) formed between the plant cell wall (CW) and the plasma membrane (PM), containing callose, phenolic compounds, reactive oxygen species, and exosomes, that likely prevents penetration (Zeyen et al., 2002; Assaad et al., 2004; An et al., 2006). (B) Upon successful penetration, the host cell forms an encasement, similar in composition to the papilla, that eventually encloses the developing haustorium (H) and prevents nutrient uptake. Similar to *Bgh*, spores of *C. destructivum* and *P. infestans* attempt to penetrate and form an intracellular pathogenic structure (IPS, haustoria, biotrophic hyphae and infection vesicle, respectively). In the case of an ineffective encasement response, the host cell initiates a cell death response that prevents pathogen growth. (C-D) Accumulation of callose in response to successful penetration by *G. orontii* (24 h). Open arrows point to the developing IPS. Bars = 20 μ m.