

APPLIED AND ENVIRONMENTAL MICROBIOLOGY

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Cover photograph (Copyright © 2010, American Society for Microbiology. All Rights Reserved.): Fruiting bodies of *Armillaria mellea* (commonly known as the honey mushroom), the causal agent of *Armillaria* root disease, at the base of an infected grapevine (*Vitis vinifera* cv. Cabernet Sauvignon) in a Napa Valley, California, vineyard. This fungus is a virulent pathogen on hundreds of woody plant species, including fruit and nut crops, timber trees, and ornamentals. Interestingly, *A. mellea* can also function as a mycorrhizal symbiont of the nonphotosynthetic orchid *Gastrodia elata*, which is used in traditional Eastern medicine. (See related article on page 7990.)