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摘要: 用大豆疫霉根腐病菌的游动孢子悬浮液处理抗性不同的野生大豆下胚轴,接种后3~72 h,用透射电镜观察野生大豆与大豆疫霉菌的亲性和非亲和性互作中细胞超微结构的变化。结果表明:接种后3~36 h,感病野生大豆随接种时间延长下胚轴细胞器结构破坏严重,而抗病野生大豆细胞结构基本完整;接种后48 h,抗病野生大豆的细胞壁物质累加,出现胞壁沉积物,而感病野生大豆细胞壁出现部分降解;接种后72 h,抗病野生大豆细胞质壁分离,但细胞器结构基本完整,感病野生大豆细胞器几乎无完整结构。

Abstract: The ultrastructures of hypocotyls of resistant and susceptible wild soybeans infected with zoospores of Phytophthora sojae from 3 to 72 h after inoculation were observed using transmission electron microscopy in this paper. The results showed that the cell structures of the susceptible wild soybean were seriously destroyed with the inoculation time from 3 to 36 h, but those of the resistant one were almost intact. The sediments on the cell wall of the resistant soybean could be seen at 48 h after inoculation, but no sediments could be seen for the susceptible one and its cell wall began to degrade to some extent. Although there was plasmolysis at 72 h after inoculation, the cell structures were almost intact for the resistant wild soybean. However, there were nearly no intact cell structures for the susceptible ones. The results could provide theoretical basis on cytology for clarification of pathogenic mechanism of P. sojae to wild soybeans.

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