



**Defense Responses of *Hevea brasiliensis*
Against Zoospores and Elicitin from
*Phytophthora palmivora***

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The proteins in elicitin family were also detected in other *Phytophthora* spp. such as *P. capsici*, *P. cactorum* and *P. parasitica*. The necrotic lesions caused by purified toxin were similar to those caused by spore inoculation. The accumulation of Scp, PR-proteins and lignin induced by toxin were highly produced in the resistant clone. Furthermore, the expression of PR-protein encoding gene (chitinase) was induced in the resistant clone after elicited with the elicitin. Therefore, the induction took place at the transcriptional level. The quantity of applied toxin was not only more precise than that of zoospore but it also induced defense reactions much more rapidly (within 24 hours). Therefore, the differences in characteristics of lesions, the levels of Scp, PR-proteins and lignin accumulation after zoospore inoculation and/or toxin treatment can be used as parameters in the selection of rubber clones resistant to *P. palmivora*.