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Purification and structure analysis of Cassiicolin, primary determinant of *Corynespora cassiicola* pathogenesis on rubber tree.

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Corynespora cassiicola is a necrotrophic fungus infecting a wide range of more than 70 host plants, including rubber tree (*Hevea brasiliensis*). During the past decade, the pathogen has caused extensive damage to rubber tree cultivation in all the producing areas. It affects both mature and immature leaves, causing typical necrotic lesions along the veins and leading to massive defoliation.

Culture filtrate from *C. cassiicola* isolates contain a toxin, named cassiicolin, able to induce leaf disease symptoms identical to those observed after fungal inoculation. An optimized protocol for the purification of this toxin has been set up. It includes mainly one step of reverse phase separation followed by gel filtration, each step being monitored by a biotest on Hevea leaves. The toxins produced by two *C. cassiicola* isolates of different aggressiveness and geographical origin (CCP and BCA3) were purified and analysed by mass spectrometry, revealing that both toxins were identical in mass. The primary sequence of the CCP toxin was determined by Edman sequencing. RMN analysis is under way for both CCP and BCA3 toxins to determine their 3D structure and confirm whether or not they are identical.

Conclusion

An optimized protocol was set up for the purification of cassiicolin, toxin responsible for the pathogenicity of Corynespora cassiicola isolates from rubber tree. Cassiicolin is a 27 amino acids glycoprotein, with a molecular mass of 2885 Da. No significant homology was detected by amino acid sequence blast analysis against public databases. Cassiicolin 3D structure was determined by NMR. Comparison of toxins from C. cassiicola strains of different geographical origins is ongoing, to assess whether variability in the toxin structure may be responsible for differences in pathogenicity.

Reference

Breton F, Sanier C, d'Auzac J (2000). Role of cassiicolin, a host-selective toxin, in pathogenicity of Corynespora cassiicola, causal agent of a leaf fall disease of Hevea.

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Dear Attendee to the XII International Congress on Molecular Plant-Microbe Interactions:

Please take note that the deadline to register with us is November 30th 2005.
Once you have made your registration, we will not be able to accept neither further changes in hotel reservations, congress cancellations nor refunds. We would like to serve you the best way we can, therefore, future cancellations of attendance past this due date will not be accepted. We remain open for on site congress registrations with credit cards or cash.

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Welcome to Mérida, Yucatán and the XII International Congress on Molecular Plant-Molecular Interactions!

The Local Scientific Committee, the Congress Staff and the Board of the MPMI Society give you the most cordial welcome to Mérida and the XII Congress of the International Society of the Molecular Plant-Microbe Interactions. It has been difficult to preserve the Congress and to make it happen after two major hurricanes hit Cancun this year. Above these natural catastrophes the scientific spirit of our Community has prevailed and the "White City" of Mérida, well known for its beauty, traditions and hospitality has welcomed us with open arms to host our XII International Congress.

We have prepared for you five days of scientific and social activities that we are confident will be enjoyable and intellectually challenging and rewarding. Over 150 invited speakers will present research talks, a Workshop on Career Choices and Opportunities in Science has been planned to encourage young scientists to join this field, and almost 600 posters will be displayed during the entire Congress.

This year the MPMI Congress attendance is expected to be over 740 registered participants. A good number of attendees have recently joined the Society. Some of them