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## Abstract Book

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# **Abstracts for Oral Presentations of AMC Sessions**

**Indigenous fungi as pathogens of crops: some examples from Australia**

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**Abstract** Several species of *Peronosclerospora* (Peronosporaceae, Oomycetes) which cause downy mildew on grasses (Poaceae) have been recorded in Australia, with two, *Peronosclerospora noblei* and *P. sargae*, being found only on wild grasses indigenous to Australia. The only downy mildew species which has caused significant damage on a cultivated grass crop in Australia was *P. sacchari* on sugarcane (*Saccharum officinarum*), but that pathogen is now considered to be eradicated. Separate outbreaks of downy mildew on maize (*Zea mays*) have been recorded in northern Australia and in southern Queensland over the past 3 decades, both being attributed to *Peronosclerospora maydis*, a serious pathogen of maize overseas. At that time, the identification of *Peronosclerospora* species was based on the morphology of the anamorph and/or of the teleomorph but the published descriptions of the asexual spore dimensions of different *Peronosclerospora* species often overlapped. Recent molecular studies have demonstrated that the downy mildew outbreaks on maize in northern Australia are most likely due to the newly described *P. australiensis* which is a pathogen of two indigenous, endemic *Sorghum* species. Similarly, the outbreak of maize downy mildew in southern Queensland was actually caused by *P. eriochloae* which up until that time had been found only on indigenous *Eriochloa* species. These recent findings of pathogens on indigenous, endemic hosts causing disease outbreaks on cultivated crops reinforce the need for ongoing taxonomic studies of such pathogens.

**S6-12****Genetic diversity among Iranian isolates of *Fusarium oxysporum* f. sp. radicis- cucumerinum using vegetative compatibility groups and RAPD molecular marker**

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**Abstract** Vascular wilt caused by *Fusarium oxysporum* is one of the most important diseases in Jiroft and Kahnuj region in south part of Iran. Forty two isolates of *Fusarium oxysporum*, the causal agent of wilt cucumber (*Cucumis sativus*), were obtained from infected tissues of cucumber seedlings and mature plants from different states in south of Iran. Out of them, 36 isolates identified as *Fusarium oxysporum* f. sp. *radicis- cucumerinum* (Forc), and studied by vegetative compatibility and random amplified polymorphic DNA (RAPD) assays. These isolates were grouped into vegetative compatibility groups (VCGs) by complementation tests using nitrate non utilizing (nit) mutants. Totally 288 nit mutants were