MCC P7. Pathotype and racial diversity of *Ascochyta rabiei* isolates in the India

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Ascochyta blight is the most destructive disease of chickpea (*Cicer arietinum* L.) caused by the fungus *Ascochyta rabiei*, in areas where low temperature (15-25ºC) and high humid (>150mm rainfall) conditions during crop growth. The aim of the study was to determine the pathotypes and physiological races of thirty *Ascochyta rabies* isolates of India. Pathotypes and physiological races were identified using *Ascochyta rabiei* specific standard international chickpea differentials. Spore's suspensions adjusted to 5×10^5 spores/ml using a haemocytometer and sprayed on 12 day old seedlings of differential lines. All the test isolates were classified into four pathotypes and five physiological races based on their aggressiveness and virulence, respectively. We found eight isolates (26.66%) from Pathotype I (Least aggressive), two isolates (6.66%) from Pathotype II (aggressive), fifteen isolates (50 %) from Pathotype III (more aggressive) and four isolates (13.33%) from pathotype IV (Highly aggressive, killed all the differentials). Predominant pathotype present in India was Pathotype III followed by pathotype I, Pathotype IV and Pathotype II. Five races such as Race 1, 4, 5, 6 and 7 were identified. The most predominant race was 5 followed by 1, 4, 7 and 6, respectively. Among the 30 Indian *A. rabiei* isolates tested for presence of mating types found in India through multiplex PCR, only MAT1-2 was found. The race 2 and 3 was not found in India and irrespective of locations multiple pathotypes and races have been identified. Authors are grateful to Science and Engineering Research Board, New Delhi for funding to carry out this research