

## CONGRATULATIONS TO MOHAMMAD ON SUCCESSFULLY DEFENDING HIS PHD

FABI congratulates Mohammad Sayari for successfully completing and defending his PhD thesis on 12 November. He presented his Prestige Seminar, entitled “Secondary metabolite pathways in Ceratocystidaceae” to an audience of his peers as well as his wife, family and friends. His PhD supervisors were Professor Brenda Wingfield, Prof. Emma Steenkamp and Dr Magriet van der Nest. The external examiners were Prof. Louis Bernier from the Centre d'étude de la Forêt at Laval University in France and Prof. Bob Proctor from the US Department of Agriculture. His internal examiner was Dr Almuth Hamerbacher.



Ascomycetes are one of the most important group of plant pathogenic fungi and cause many important diseases. In his thesis, Mohammad investigated secondary metabolite pathways in different members of the family Ceratocystidaceae. Polyketide synthase (PKS) and Non-Ribosomal peptide Synthetase (NRPS) coding gene clusters were identified in this family using different bioinformatics and molecular approaches. Furthermore, he developed a stable and high-efficiency *Agrobacterium tumefaciens* Mediated Transformation (ATMT) system for *Ceratocystis albifundus*. Different parameters were considered to optimise the technique. The average ergosterol content as well as all possible terpenoid related genes and biosynthetic clusters of different genera of Ceratocystidaceae were also identified. The outcomes of the current research shed light on our knowledge of secondary metabolite biosynthesis pathways in Ceratocystidaceae. Mohammad will pursue his postdoc at the University of California, Davis in 2020.