

# 9. INTERNATIONAL CONFERENCE ON AGRICULTURE, ANIMAL SCIENCES AND RURAL DEVELOPMENT

**19-20 MARCH, 2022 / BURDUR**



**CONFERENCE  
PROCEEDINGS BOOK**

EDITOR

Prof. Dr. Hakan ONER

Assoc. Prof. Dr. Seyithan SEYDOSOGLU

**ISPEC**  
**9th INTERNATIONAL CONFERENCE ON AGRICULTURE,  
ANIMAL SCIENCE and RURAL DEVELOPMENT**

**DATE – PLACE**  
**March 19-20, 2022**  
**Burdur, TURKEY**

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**19.03.2022 | SESSION-3 | HALL-3**

**Ankara Local Time: 16:<sup>00</sup>-18:<sup>30</sup>**

**Meeting ID: 813 0239 2783 | Passcode: 990099**

**HEAD OF SESSION: Assist Prof. Dr. Umair AHSAN**

<b>Authors</b>	<b>Affiliation</b>	<b>Presentation title</b>
Faisal Zulhumadi Wan Nadzri Osman Mohamed Najib Salleh	Universiti Utara Malaysia	Comparison study of drone technology development in paddy rice farming in malaysia, Indonesia, Thailand, and Brunei
Önder Akkaş Şenol Güzel	Burdur Mehmet Akif Ersoy University	Collective breeding and collective milking modeling in large animal production: The case of Burdur
M.M.N.T. Bandara N. Dahanayake P.C.D. Perera S. Subasinghe	University of Kelaniya	Selection of a best hormone combination for shoot regeneration in turmeric ( <i>Curcuma Longa</i> ).
Alptekin Mert Yilmaz Oktay Tomar	Kocaeli University	The future of agricultural tourism (agro-tourism) in Turkey
Gennady Karaschuk Vadym Ilchuk Sergiy Lavrenko	Kherson State Agrarian and Economic University	Influence of variety composition, row space and nutrition background on the yield of table pumpkin
Alptekin Mert Yilmaz Oktay Tomar Özge Can Niyaz	Kocaeli University	Geographical indication cheese consumption behavior of consumers
Amol Shinde Sameer Nanivadekar Bhushan Chavan Sushrut Patankar Raju Kumar Swami	A P Shah Institute of Technology	Design and development of manually operated agricultural sprayer
Tülay Özkan Ramazan Bakirci	Burdur Mehmet Akif Ersoy University	Production and marketing problems in goose growing businesses in Turkey
Valentim Coelho Júlia Machado Inês Guerra Eugénia Gouveia	Instituto Politécnico de Bragança	In vitro antagonism evaluation of endophyte <i>Chaetomium aureum</i> against <i>Cryphonectria parasitica</i>
Murat Şevik	Necmettin Erbakan University	Seroprevalence and risk factors of bluetongue virus infection in small ruminants in Antalya province, Turkey

(All speakers required to be connected to the session 10 min before the session starts)

Moderator is responsible for ensuring the smooth running of the presentation, managing the group discussion and dynamics.

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**IN VITRO ANTAGONISM EVALUATION OF ENDOPHYTE *CHAETOMIUM AUREUM*  
AGAINST *CRYPHONECTRIA PARASITICA***

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**ABSTRACT**

The European chestnut tree (*Castanea sativa* Mill.) is threatened by various microfungi that affect its production. In the trunk and branches infected by chestnut blight (*Cryphonectria parasitica* (Murril) Barr.) it was observed the presence of several microfungi that co-occur in the presence of the disease among which the endophytic fungus *Chaetomium aureum* Chivers. Many species of the genus *Chaetomium* are described as antagonists of plant fungi and various soil microorganisms, and the secondary metabolites of these species exhibit biological activities. The aim of this work was to study the antagonist activity of the fungus *C. aureum* against *C. parasitica*. The study was carried out under *in vitro* conditions by establishing co-cultures in PDA culture medium. Five repetitions were performed for each co-culture and the inner and outer radius of the colonies were measured for 10 days. The mycelial growth inhibition was expressed as percentage growth inhibition in relation to the control co-culture. The reduction of growth of the internal radius of *C. parasitica* by *C. aureum* was significant (P=0.02) after 10 days with an inhibition of 36.8%, and no contact was observed between colonies. This study highlights the importance of phytobiome in controlling chestnut trunk and branch diseases and the need to continue screening for fungal isolates that are candidates for natural disease control on chestnut.

**Key-words:** chestnut tree, chestnut blight, phytobiome, antagonist activity