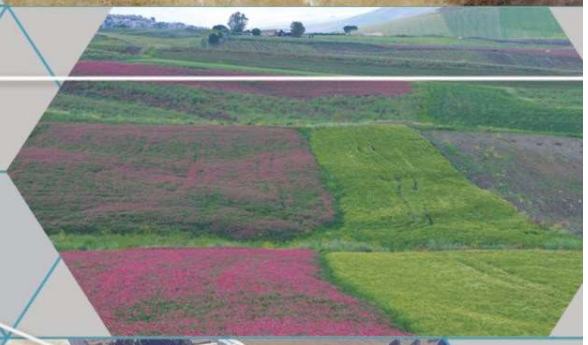
ISPAMED 2023

International Conference
Palermo 12 - 13 July 2023



International Conference

Innovations for Sustainable Crop Production in the Mediterranean Region

Palermo 12 - 13 July 2023

Book of abstract

SAAF DIPARTIMENTO SCIENZE AGRARIE ALIMENTARI FORESTALI 80 1942 2022 Studi Universitari Scienze Agrarie

Università degli Studi di Palermo

crea Consiglio per la ricerca in agricoltura e l'analisi dell'economia agraria

CoRiSSIA Consorzio di Ricerca per lo Sviluppo di Sistemi Innovativi Agroambientali

INTESA

ITS SICANI START YOUR FUTURE

International conference Innovations for Sustainable Crop Production in the Mediterranean Region

Editor: Giuseppe Di Miceli and Giovanni Gugliuzza

First edition 2023 - www.ispamed.org

ISBN: 9791221055955

Collaboratory: Nicoletta Lala

Scientific Committee

Tiziano Caruso - Chair
Giuseppe Di Miceli
Georgia Ntatsi
Giovanni Gugliuzza
Geanina Bireescu
Vittorio Farina
Zied Driss
Roberto Massenti
Saadia Zrira
Marzia Traverso
Mario Licata
Alban Ibraliu
Simona Bacarella

Organizational Committee

Giuseppe Di Miceli - Chair
Giovanni Gugliuzza
Salvatore Davino
Claudio Leto
Riccardo Lo Bianco
Filippo Sgroi
Leo Sabatino
Pio Federico Roversi
Nicolò Iacuzzi
Davide Farruggia
Beppe Benedetto Consentino
Simona Prestigiacomo
Teresa Tuttolomondo
Francesco Salamone
Federico Modica
Salvatore La Bella
Teresa Totaro
Lorena Vultaggio
Antonio Giovino
Annalisa Marchese
Lucia Dinolfo
Nicoletta Lala
Monica Auteri

Effects of abiotic stresses and climate change on plant-fungi symbiosis

Torta L.; Lamendola M.
Department of Agricultural, Food and Forest Sciences (SAAF), University of Palermo, Viale delle Scienze, 90128 Palermo, Italy

Abstract
Plants are naturally colonized by numerous fungal entities which establish different symbiotic relationships with the hosts. Mycorrhizal or pathogenic associations are generally characterized by mutualistic and antagonistic symbiosis, respectively. Endophytic fungi, on the other hand, vary their relationship with the host according to its vegetative state.
These complex and delicate balances can be altered by environmental disturbance agents, capable of inducing acute or chronic stresses on the host plants. In particular, climate change, causing vegetational and physiological alterations, can be directly or indirectly related to variations in the symbiotic relationship between fungi and plants. Furthermore, the introduction of new species of fungal microorganisms or the recrudescence of fungal infections have already been reported as a consequence of global warming.
In the light of these new emergencies, it is appropriate to define innovative strategies aimed, on the one hand, at restoring the best vegetative state of the plants and, on the other, at containing new infections.