21st G*i*ESCO International Meeting
(Group of international Experts for Cooperation on Vitivinicultural Systems)

ORGANIZERS

PATRONAGE

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Thessaloniki, September 25th, 2018

2nd Announcement

Dear Colleagues,

The Organizing Committee of the 21st G*i*ESCO International Meeting that will take place in Thessaloniki (Greece) from the 23rd to the 28th of June 2019 is pleased to announce that the **Call for Abstracts** is open.

The deadline for abstract submission is November 30, 2018.

Authors are invited to submit one or several papers on the following **topics**:

- Soil and zoning
- Climate Change
- Genetic resources
- Pre-breeding and Breeding
- Vine physiology and water relations
- Fruit development and ripening
- Pruning and trellising
- Viticultural practices
- Mechanization
- Precision Viticulture
- New technologies in Viticulture
- Economics
- Territory and growers experiences
- Sustainable Viticulture

The Scientific Committee of the 21st G*i*ESCO Meeting welcomes **5 types of communications**:

1. *Special Scientific Oral (SSO)*
SSO corresponds to original research that authors would like both to present as a full oral presentation and to publish in a peer-reviewed journal. For the 21st G*i*ESCO meeting, OENO One (*https://oeno-one.eu*) has accepted to edit a special series. *Time slot dedicated to SSO is 15' for slide show + 5' for questions.*

2. *Scientific Oral (SO)*
SO corresponds to original results that authors want to keep for further publication in a peer-reviewed journal. *Time slot dedicated to SO is 12' for slide show + 3' for questions.*

3. *Professional DayOral (PDO)*
PDO corresponds to professionally-oriented communications, i.e. dealing with extension or reviewing technological topics. *A special day will be organized during the meeting for PDO sessions. Time slot dedicated to PDO is 12' for slide show + 3' for questions.*

4. *Flash Oral (FO)*
FO corresponds to short presentations highlighting very new scientific topics and/or original provisional results. *Time slot dedicated to FO is 5' for slide show + 2' for questions.*

5. *Poster Communication (PC)*
PC corresponds to research confirming or complementing previous reports (e.g. extending previous findings to different varieties or regions...).

All types of communications must be submitted as an abstract **in English** with a maximum of 500 words (including title, authors, affiliations, text and keywords) in one page *as Word* (.doc and .docx) *documents* (**see abstract template below**).

Abstracts must be submitted by completing the abstract submission form on the Congress website: **www.giesco2019.gr**

- All authors and their affiliations must be filled in the order presented in the abstract.
- All authors must be identified by full name, institution/organization/company, postal address and e-mail. The corresponding author details are particularly important.
- Authors must select the topic/section best adapted to their contribution.
- Authors must select the type of communication among SSO, SO, PDO, FO and PC.
- In the case of SSO, SO, PDO and FO, the registration of the speaker is mandatory. It is understood that the corresponding author will give the presentation (otherwise the name of the speaker must be provided).
- In the case of PC, the registration of one of the authors is mandatory.

G*i*ESCO 2019 Thessaloniki
Organizing Committee

Abstract template (1 page)

THE MICROVINE: AN ECOPHYSIOLOGICAL MODEL FOR GRAPEVINE

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Abstract:

Context and purpose of the study - Microvine is a natural mutant of grapevine characterized by a dwarf, rapid cycling and continuous flowering phenotype. Thanks to both its compacted architecture and the continuous flowering, new insights into grapevine yield and quality responses to climate changes are expected using this material. However, little is known regarding the main patterns of microvine growth and development, and how they differ from classical genotypes. The present study was aimed at quantifying key vegetative and reproductive characters of a reference microvine line (ML1) together with the cv. Grenache N., and at comparing the spatial and temporal growth patterns displayed by the ML1 microvine.

Material and methods - Potted plants of ML1 and Grenache N. were grown outdoorin 2009 and in greenhouse in 2011 and 2012, at max ETP (evapotranspiration). Vegetative and reproductive organogenesis were monitored twice a week. Leaf and berry growth were recorded twice a week. Berry fresh weight and total soluble solids were determined for all stages of berry development at once when basal bunches reached ripe stage (i.e. 20-22° Brix).

Results - Shorter internodes and smaller leaf area were observed in L1 compared with Grenache N. Along the axis, L1 continuously held inflorescences instead of tendrils. Flowers and berries number per inflorescence were lower in L1 than in Grenache N., and flower or berry abortion was nearly zero in L1. In spite of these differences, phyllochrons and leaf expansion duration after leaf emergence were similar for both materials. Moreover, maximal berry diameter and fresh weight were close for the two genotypes. A phenological model simulating leaf and berry key developmental phases was parameterized for L1. The model was used to convert spatial leaf and berry growth dynamics along the axis into temporal dynamics, which were compared to temporal dynamics at a given phytomer rank. The good match between the two patterns indicated the temporal changes can be inferred from spatial patterns. These results open new fields in grapevine studies. Short term experiment can now be designed under fully controlled environments using microvine in order to quantify the impact of abiotic stresses on a variety of traits underlying yield or berry quality simultaneously.

Keywords: Grapevine, Microvine, Growth, Organogenesis, Developmental pattern, Spacio-temporal gradient.