

Monday, 2nd September 20198:00-9:00 **REGISTRATION**9:00-9:40 **OPENING CEREMONY**9:40-10:20 **INVITED LECTURE****M.A. Flaishman - Fresh fig industry: Progress and challenges**

10:20-10:50 Coffee break

LECTURES Session 1 - Biodiversity, Genetic Resources, Genomics, and Transcriptomics**Moderators: D. Poljuha & M. Flaishman**

10:50-11:10 J.E. Preece, M. Aradhya - Analyses of the amount and pattern of distribution of genetic diversity in the USDA-ARS National Clonal Germplasm Repository, Davis, California fig germplasm collection

11:10-11:30 I. Mitrofanova, O. Mitrofanova, N. Lesnikova-Sedoshenko, N. Ivanova, T. Kuzmina, S. Chelombit - Creation of *Ficus carica* in vitro germplasm collection in the Nikita Botanical Gardens

11:30-11:50 T. Kokaj - Investigation and value of qualitative and quantitative characteristics of 10 fig genotypes

11:50-12:10 F. Stanica, A.C. Butcaru, A.C. Asanica, C.A. Mihai - Selection of several fig genotypes (*Ficus carica* L.) from the Romanian fig populations assessment

12:10-12:30 E. Aydin, N. Aksu Uslu, E. Er, Muharrem Ozcan - Pomologic characteristic of some figs types obtained by selection in province Artvin, Giresun and Ordu

12:30-12:50 V. Nuzzo, D. Amato, N. Briglia, G. Montanaro - Morphometric characterization of some local fig cultivars grown in Southern Italy

12:50-13:50 Lunch

POSTER Session 1 - Genetic variability and resources & Plant (eco)physiology and propagation**Moderators: D. Poljuha & M. Flaishman**

13:50-14:20

P1-1 P. Belloni - A collection of germplasm of *Ficus carica* in Puglia (South-East Italy), available for scientific studiesP1-2 T. Caruso, R. Mafrica, M. Bruno, A. De Bruno, A. Piscopo, M. Poiana - Cultivar and accessions of fig (*Ficus carica* L.) for breba production selected within the autochthonous germplasm of Calabria (South Italy)

P1-3 G. Ferrara, A. Mazzeo, R. Terzano, C. Porfido, A. Gadaleta - Anatomical and genetic characteristics of fruit buds of main crop and breba

P1-4 D. Poljuha, I. Kralj, M. Krapac, T. Klepo, M. Radunić, F. Strikić, A. Baruca Arbeiter, M. Hladnik, D. Bandelj - Analysis of genetic diversity in Croatian fig (*Ficus carica* L.) germplasm using SSR markersP1-5 G. Usai, F. Mascagni, T. Giordani, A. Vangelisti, E. Bosi, A. Zuccolo, M. Ceccarelli, R. King, K. Hassani-Pak, L. Solorzano Zambrano, A. Cavallini, L. Natali - A long-read phased assembly of the highly heterozygous fig (*Ficus carica* L.) genome reveals epigenetic patternsP1-6 I. Mitrofanova, O. Krivenko, O. Kuleshova, E. Chelebjeva, E. Vodiasova, O. Mitrofanova - Development of protoplast isolation method in some cultivars of *Ficus carica* as crucial stage for implementation of single-cell RNA-seq technology in plant investigation

P1-7 A. Ammar, I. Ben Aissa, M. Gouiaa, M. Mars - Effect of irrigation shortage on gas exchange capacity of San Pedro fig type

P1-8 J. Bartual, M. Ortiz, J. Garcia - Effects of rootstock and rest breaking agents on early ripening and fruit quality of 'Colar' fig (*Ficus carica* L.) in southeast SpainP1-9 T. Arsov, N. Saraginovski - Effect of auxin phytohormones on the rooting of some local populations of fig (*Ficus carica* L.) from North Macedonia**LECTURES Session 2 - Biodiversity, Genetic Resources, Genomics, and Transcriptomics****Moderators: D. Bandelj & J.E. Preece**14:20-14:40 K. Lama, R. Peer, M.A. Flaishman - Ripening regulation and quality characterizations of fresh fig (*Ficus carica* L.)

14:40-15:00 G. Usai, F. Mascagni, T. Giordani, A. Vangelisti, E. Bosi, A. Zuccolo, M. Ceccarelli, R. King, K. Hassani-Pak, L. Solorzano Zambrano, A. Cavallini, L. Natali - High-quality, haplotype-phased de novo assembly of the highly heterozygous fig genome, a major genetic resource for fig breeding

15:00-15:20 R. Peer, H. Shafran-Tomer, O. Cohen, K. Lama, M.A. Flaishman - Genome editing: CRISPR/Cas9 approaches of *Ficus carica*15:20-15:40 K. Shirasawa, H. Yakushiji, H. Ikegami, T. Morita, S. Jikumaru, A. Toyoda, H. Hirakawa, S. Isobe - Genome sequence analysis on *Ficus carica* and *F. erecta* for the Ceratocystis canker resistance breeding programs in fig

15:40-16:00 M. Song, Z. Wang, H. Ma - Molecular analysis of anthocyanin biosynthetic pathway in fig peel during fruit ripening and functional study of FcMYB114 gene

16:00-16:30 Coffee break

LECTURES Session 3 - Plant (eco)physiology and propagation**Moderators: T. Caruso & I. Prgommet**

16:30-16:50 G. Caruso, G. Palai, D. Macheda, F. Marchini, L. Tozzini, A. Minnocci, L. Sebastiani, M. Frank Quartacci, R. Gucci - Physiological mechanisms of adaptation of young fig plants to salinity

16:50-17:10 R. Ara, S.A. Kamal Uddin Khan - Effect of rooting substrates and cutting types in propagation of fig (*Ficus carica*)17:10-17:30 T. Caruso, R. Mafrica, M. Bruno, D. Fratia, R. Vescio, A. Sorgonà - Effects of treatments of arbuscular mycorrhizal fungi on the 2-D architectural traits of rooted cuttings of two fig (*Ficus carica* L.) cultivars

17:50-18:20 General discussion

18:20-19:30 **WELCOME RECEPTION**

Fig Cultivars & Art Exhibition

Tuesday, 3rd September 20199:30-10:10 **INVITED LECTURE****U. Aksoy - Dried fig industry: Progress and challenges****LECTURES Session 4 - Fruit quality and postharvest technology****Moderators: U. Aksoy & K. Brkić Bubola**10:10-10:30 A. Karantzi, M. Kafkaletou, M. Christopoulos, A. Sakellaridis, E. Tsantili - Physicochemical traits during fruit development of the two main Greek fig (*Ficus carica* L.) fruit varieties destined to fresh market

10:30-10:50 M. Barbarić, M. Ivanković, M. Prlić - Evaluation of the organoleptic characteristics of the fig fruits "Petrovača bijela" from Herzegovinian area

10:50-11:10 G. Sortino, V. Farina, P. Inglese, A. Gallotta, A. Allegra - Postharvest quality and sensory attributes of organically grown *Ficus carica* L.

11:10-11:30 B. Ertan, O. Tuncay, S. Arpacı - Determination of quality losses during the transportation of some table figs varieties

11:30-11:50 A. Allegra, V. Farina, A. Gallotta, P. Inglese, G. Sortino - The use the MAP for maintaining quality of fig fruits cv 'Bifara'

11:50-12:10 Coffee break

LECTURES Session 5 - Fruit quality and postharvest technology**Moderators: B. Levaj & N. Major**12:10-12:30 A. Kurubar - Effect of Aloe vera gel and chemicals coating on post-harvest biochemical properties of fig (*Ficus carica* L.) fresh fruits12:30-12:50 A. Kurubar - Post-harvest fruit treatment with aloe vera gel on physiological, microbial infections and sensory attributes of fig (*Ficus carica* L. Poona fig) fresh fruits

12:50-13:10 A. Allegra, V. Farina, A. Gallotta, P. Inglese, G. Sortino - Qualitative traits and shelf life of fig fruit (cv. Melanzana) treated with Aloe Vera gel coating

13:10-13:30 Z. Pelaić, Z. Čosić, Z. Zorić, S. Pedisić, M. Repajić, B. Levaj - Overview of food products fortified with dried fig; minimally processed and fig filled potato

13:30-14:30 Lunch

POSTER Session 2 - Fruit quality and postharvest technology**Moderators: B. Levaj & N. Major**

14:30-15:10

P2-1 K. Brkić Bubola, E. Šetić, M. Krapac, A. Novoselić - Preliminary characterization of morphological and sensorial profile of the fresh fig (*Ficus carica* L.) fruits obtained from four Croatian cultivarsP2-2 B. Gonçalves, I. Prgommet, A. Vilela, N. Pascual Seva, Z. Prgommet - Fresh fig (*Ficus carica* L.) varieties grown in Croatia: sensory attributes and pomological characteristicsP2-3 S. Pedisić, Z. Pelaić, M. Repajić, B. Levaj - Effect of freezing procedure on polyphenol and sugar contents of fig (*Ficus carica* L.) during storage

P2-4 B. Levaj, V. Dragović-Uzelac, S. Lončarić, M. Repajić - Fig freezing in sugar solution: quality and sensory during storage

P2-5 B. Levaj, V. Dragović-Uzelac, S. Pedisić, I. Elez Garofulić, S. Lončarić, N. Vahčić, M. Repajić - Effect of ripening stage, pectin edible film and packaging conditions on fig (*Ficus carica* L.) quality and shelf-life

P2-6 A.I. Galván, M. López-Corrales, M. de Guía Córdoba, A. Hernández, G. Domínguez, M. J. Serradilla - Application of microperforated films for preservation of 'Dalmatie' figs (*Ficus carica* L.)

P2-7 N. Major, I. Prgomet, Z. Prgomet, D. Ban, I. Palčić, J. Perković, S. Goreta Ban - Antioxidant activity, phenolic and sugar content of light and dark dried fig (*Ficus carica* L.) varieties grown in Croatia

P2-8 A.I. Galván Romero, M.J. Serradilla Sánchez, M. López Corrales, A. Martín, S. Ruiz-Moyano, M. de Guía Córdoba Ramos - Effect of the application of different storage temperatures with active modified atmospheres on the shelf life of dried figs

P2-9 M.G. Bogović, J. Bilobrk, B. Levaj, S. Karlović, D. Bursać Kovačević - Evaluation of polyphenols, textural and sensory characteristics in dried figs from the Croatian market

P2-10 D. Lachtar, F. Zaouay, C. Pereira, A. Martin, J. Ben Abda, M. Mars - Organoleptic characteristics of dried figs following different solar drying techniques

P2-11 I. Mujić, H. Jukić, B. Sarkanj, Z. Prgomet, S. Zec Sambol - Mycotoxin content in dried autochthonous figs Šaraguja and Petrovača Bijela

P2-12 H. Ikegami, H. Suzuki, M. Sato, K. Shirasawa, S. Himeno, H. Nogata - Gas chromatography-mass spectrometry analysis of volatiles of two Japanese cultivars of fig for flavor breeding

P2-13 F. Stanica, C. Constantin, A.C. Butcaru, A.C. Asanica, C.A. Mihai - Biochemical assessment of some extracts derived from leaves and fruit of *Ficus carica* L.

LECTURES Session 6 - Fruit quality and postharvest technology

Moderators: H. Ma & K. Brkić Bubola

15:10-15:30 I. Prgomet, Z. Prgomet, D. Ban, J. Perković, D. Donno, I. Palčić, S. Goreta Ban, N. Major - Antioxidant activity, sugar and phenolic content of fresh fig (*Ficus carica* L.) fruits commonly grown in Croatia

15:30-15:50 M. Ingrassia, P. Columba, S. Chironi, A. Allegra, G.

Sortino - Study on consumer preferences for quality attributes of fig fruit after storage at home temperature

15:50-16:10 S. Arpacı, E. Cicek, R.Konak, N. Tan, G. Kuruoglu Ascı - Research of different preservation and storage techniques on semi dried figs

16:10-16:30 U. Aksoy, F. Sen, B. Kamer Ozer, H. Zafer Can, R. Konak - Effect of altitudes on physical and chemical properties of sun-dried fig (*Ficus carica* cv. Sarilop) fruit

16:30-17:00 General discussion

20:00 Gala dinner

Wednesday, 4th September 2019

Field-trip

09:00 Departure from Rovinj (meeting point:Lone hotel lobby/entrance)

10:30-12:30 Arrival to Savudrija (Hrvatske šume)
Planned visit to 4 ha fig orchard
Coffee break

12:30 Departure to Motovun

13:30-15:00 Tour of Motovun

15:00 Departure to "Konoba Bani", Pazin

15:45-19:00 Lunch in "Konoba Bani"

19:00 Departure to Rovinj

Thursday, 5th September 2019

LECTURES Session 7 - Fig production and orchard management

Moderators: P. Gordon & M. Krapac

9:00-9:20 C. Vera Ponce - 'Figs with history': a gastronomic and historical immersion through Europe and Perú

9:20-9:40 H. Ma - The fig production, research and development in China

9:40-10:00 C.H. Crisosto, T.J. Michailides, L. Ferguson, M. López Corrales, G. Crisosto - Reducing fresh fig (*Ficus carica*) postharvest losses

10:00-10:20 K. Stockli - California dried and fresh fig (*Ficus carica*) industries: production and innovative marketing activities

10:20-10:40 P. Gordon, J. Preece, L. Ferguson, M. Aradhya, M.

Norton, H. Garrison, C. DeBenedetto - Field evaluation of new and underutilized fig cultivars for fresh and dried markets

10:40-11:00 Coffee break

POSTER Session 3 - Fig production and orchard management

Moderators: P. Gordon & M. Krapac

P3-1 P. Bañuls, M.A. Manzano, F. Pérez Gragera, G. Domínguez, M.J. Serradilla, A.I.Galván Romero, M. López Corrales - Agronomic evaluation and fruit quality of fig tree variety collection in the Jerte Valley (Spain)

P3-2 U. Aksoy, F. Sen, B. Kamer, Ozer, H. Zafer Can, R. Konak - Effect of yearly conditions on sugar composition of fresh, partially dried and sun-dried fig fruit

P3-3 D. Neri, E.M. Lodolini - Pruning fig (*Ficus carica* L.) during the early stages after planting

P3-4 M. Krapac, D. Gluhić, S. Goreta Ban, M. Petek, N. Major, Z. Užila, I. Palčić - The influence of potassium foliar application on mineral content of fig (*Ficus carica* L.) leaves and fruits

P3-5 V. Brailko, O. Grebennikova, Y. Plugatar - Biochemical aspects of fig plants adaptation to low temperatures

P3-6 H. Zare, E. Zare, S. Sedaghat, J. Moslem - Investigation of different horticultural practices to minimize drought impacts in rainfed fig (*Ficus carica* L. cv. Sabz)

P3-7 I. Prgomet, N. Major, Z. Prgomet, D. Ban, J. Perković, I. Palčić, S. Goreta Ban - Improving total antioxidant activity of fresh fig fruits (*Ficus carica* L.) by irrigation

LECTURES Session 8 - Fig production under climate change

Moderators: C.H. Crisosto & S. Goreta Ban

11:30-11:50 A.I. Galván Romero, P. Gragera Fernando, M. J. Serradilla, M. de Guía Córdoba Ramos, G. Domínguez, M. López Corrales - Agronomic behaviour and fruit quality attributes of three dried fig varieties in super high-density system

11:50-12:10 J. Moslem, M. Rahemi - Canopy management in fig trees by rootstock usage

12:10-12:30 B. Gaaliche, J. Ben Yahmed, H. BenMoussa, M. Ben Mimoun - Does caprifigs position in the tree canopy affects fig (*Ficus carica* L.) yield and fruit quality?

12:30-12:50 S. Arpacı, M.A. Kargıcak, P. Gorucuoglu - Comparison the growth and yield values of some fig cultivars under irrigated conditions

12:50-13:10 Y. Mohamed, I. Mohamed ElBerry - Alleviation of drought stress on rainfed fig (*Ficus carica* L.) trees in Egypt using the foliar application of ascorbic and citric acids

13:10-14:10 Lunch

LECTURES Session 9 - Pest and disease management

Moderators: H. Ikegami & D. Vončina

14:10-14:30 T. Elbeaino, M. Digiario - Fig-infecting viruses: state of the art

14:30-14:50 E. Gargani, I. Cutino, A. Strangi, G. Mazza, C. Benvenuti, R. Frosinini, G.P. Barzanti - *Aclees* cf. sp. *foveatus*, a real threat to *Ficus carica* in the Mediterranean area

POSTER - Session 4 - Pest and disease management

Moderators: H. Ikegami & D. Vončina

P4-1 M. Gonçalves - Evaluation of food attractants for the black fig fly in Southern Portugal

P4-2 E. Gargani, I. Cutino, G.P. Barzanti, C. Benvenuti, R. Frosinini, E.M. Lodolini, E.Caboni, K. Carbone - The black weevil of the fig tree (*Aclees* sp. cf. *foveatus*): control trials with plant extracts

P4-3 V. Brailko, I. Mitrofanova, Y. Plugatar, S. Chelombit, S.Chirkov, O. Mitrofanova - Morphological and anatomical changes in leaves of some cultivars in *Ficus carica* L. damaged with viral diseases

P4-4 T. Miličević, D. Vončina - Occurrence of plant pathogens and diseases incidence on fig tree in Croatia

P4-5 S. Di Silvestro, M.C. Strano, F. Ferlito, B.F. Torrisi, M. Allegra, E.M. Lodolini, S. Bella - Detection and characterization of a new fungal disease emergency on fig (*Ficus carica* L.) in Sicily

P4-6 P. Calvo, M. Soledad Blanco, M.J. Rodríguez, M.J. Serradilla, F. Sánchez - In vitro and in vivo antifungal activity of allyl isothiocyanate (AITC) against *Penicillium expansum* in figs (*Ficus carica* L.)

15:10-15:40 General discussion and closing

15:40-16:20 ISHS Business meeting