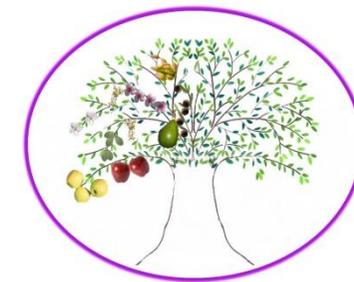


# SCIENTIFIC PROGRAM

## International Symposium on Flowering, Fruit Set and Alternate Bearing

Palermo, Italy, June 19-23, 2017



### SUNDAY 18 June 2017

Location: "Palazzo Chiaramonte Steri"

17:00-19:00	Registration
19:00-20:30	Welcome Reception

### MONDAY 19 June 2017

Location: "Sala delle Capriate, Palazzo Chiaramonte Steri"

8:00-8:30	Registration		
8:30-9:00	Opening and Welcome		
9:00-9:30	Plenary Lecture "An evolutionary platform for alternate bearing in fruit trees" – Eliezer E. Goldschmidt		
Chair: Sisir Mitra	9:30-10:00	Rosario Muleo	Session I: Genetics and genomics Invited Lecture "What we know about induction and stability of flowering"
	10:00-10:15	Evelyne Costes	<i>Genetic determinism of flowering regularity over years in an apple multi-family population</i>
	10:15-10:30	Feng Ding	<i>Development of molecular markers to discriminate early- and late-flowering litchi cultivars based on promoter difference of LcFT1</i>
	10:30-10:45	Amnon Haberman	<i>A role for a TFL1 orthologue in alternate bearing of apples</i>
	10:45-11:00	Prem Bhalla	<i>Molecular and epigenetic investigations on floral induction using soybean as a model system</i>
11:00-11:30	Coffee Break		
Chair: Evelyne Costes	11:30-11:45	Henryk Flachowsky	<i>A European study on the time of flower induction in apple</i>
	11:45-12:00	Pedro Martinez-Gomez	<i>Gene expression analysis in field conditions of related dormancy genes during bud dormancy progression in almond</i>
	12:00-12:15	Omer Crane	<i>Characterization of abscission-related pathways during early apple fruitlet development: a marker-assisted horticultural practices approach</i>
	12:15-12:30	Julian Kofler	<i>Biennial bearing in apple: proteomic profiling of vegetative and floral buds</i>
	12:30-12:45	Erika Varkonyi-Gasic	<i>Three FT and multiple CEN and BFT genes regulate maturity, flowering and vegetative phenology in kiwifruit</i>
	12:45-13:00	Peter Balk	<i>Monitoring release from dormancy in fruit trees and ornamentals using transcriptomics and its implications for horticulture</i>
13:00-14:30	Lunch Break		
14:30-15:30	Poster Session (see page 4 for details)		
Chair: Annalisa Marchese	15:30-15:45	Gregory Reighard	<i>Early thinning of peach fruit influences expression of cell growth and expansion genes</i>
	15:45-16:00	Ángela Sánchez-Prudencio	<i>Molecular cloning and expression of PdP40, a flower specific Class III peroxidase gene in almond</i>
	16:00-16:15	Carlos Mesejo	<i>Flowering inhibition in Citrus: a comparison between the juvenile and adult stages</i>
	16:15-16:30	Federico Martinelli	<i>RNAseq analysis to investigate alternate bearing mechanism in Pistacia vera (L.)</i>
16:30-17:30	Transfer to the Botanical Garden of Palermo		
17:30-19:00	Visit to the <a href="#">Botanical Garden of Palermo</a>		

## TUESDAY 20 June 2017

Location: "Sala delle Capriate, Palazzo Chiaramonte Steri"

Session II: Environmental factors, endogenous interactions and phenoclimatic models			
Chair: Michael Blanke	8:30-9:00	Maciej Zwieniecki	<b>Invited Lecture "Analysis of temporal and spatial dynamics of carbohydrate management in nut trees offers novel insight to understanding uneven/alternate bearing phenomena"</b>
	9:00-9:15	Francesco P. Marra	<i>Predicting olive flowering phenology with phenoclimatic models</i>
	9:15-9:30	Sisir Kumar Mitra	<i>Elucidation of the factors affecting poor flowering in litchi and measures to overcome it</i>
	9:30-9:45	Ángela Sánchez-Prudencio	<i>Estimation of chilling and heat requirements of late and extra-late almond varieties during cold and warm seasons</i>
	9:45-10:00	Michael Blanke	<i>Quantifying key parameters as elicitors for alternate bearing in 'Elstar' apple trees</i>
	10:00-10:15	Houbin Chen	<i>The growth of 'Feizixiao' litchi trees with region-specific differences in China</i>
10:15-10:45	<b>Coffee Break</b>		
10:45-12:00	<b>Poster Session (see page 4 for details)</b>		
Chair: Carlos Mesejo	12:00-12:15	Francesco P. Marra	<i>A carbon budget model to predict branch carbohydrate deficiencies as a function of water stress and crop load in pistachio</i>
	12:15-12:30	Liliana Gaeta	<i>Comparison between two methods of estimation of chilling and heat requirements for flowering in almond</i>
	12:30-12:45	María Teresa Prats-Llinàs	<i>Modelling bud break phenology in Chardonnay grapevine using the chill overlap model framework</i>
	12:45-13:00	Oswaldo Kiyoshi Yamanishi	<i>Evaluation of growth of papaya fruits in plants propagated from seeds and from grafting, as a function of the accumulated degree-days</i>
13:00-14:30	<b>Lunch Break</b>		
Chair: Hava Rapoport	14:30-15:00	Jens Wünsche	Session III: Biology and environmental physiology <b>Invited Lecture "Ecophysiology - the plant's adaptivity to changing environments"</b>
	15:00-15:15	Vered Irihimovitch	<i>Exploring the effects of fruit load on floral induction in 'Hass' avocado trees</i>
	15:15-15:30	Carlos Miranda Jiménez	<i>Influence of bud quality and wood age on fruit set and alternate bearing in 'Conference' pear</i>
	15:30-15:45	Bruno Holzapfel	<i>Intra-seasonal fluctuation of bud fruitfulness in Chardonnay and Shiraz in two wine regions</i>
	15:45-16:00	Dario Stefanelli	<i>Young apple tree responses to crop load</i>
	16:00-16:15	Benoit Pallas	<i>Investigating the impact of source/sink manipulations on within tree variations of floral induction and fruit weight</i>
16:30-18:00	<b>Visit to the Museum of the Holy Inquisition Jail in Palazzo Chiaramonte Steri</b>		

## WEDNESDAY 21 June 2017

TECHNICAL TOUR		
7:30-20:30	7:30	Departure from the Symposium venue – <a href="#">Palazzo Steri</a>
	10:00 – 12:00	Visit of the plant nursery "La Palmara"
	13:00	Lunch at restaurant F.Ili Borrello ( <a href="http://www.trattoriaborrello.it">www.trattoriaborrello.it</a> )
	15:30 – 16:30	Visit of tropical fruit farm "Cupitur" ( <a href="http://www.agrotropicsicilia.com">www.agrotropicsicilia.com</a> )
	17:00 – 19:30	Visit to Cefalù town
	20:30	Arrival at the Symposium venue – <a href="#">Palazzo Steri</a>

## THURSDAY 22 June 2017

Location: "Aula Magna, Department of Agricultural, Food and Forest Sciences, University of Palermo"

Session III: Biology and environmental physiology			
<b>Chair:</b> Giora Ben-Ari	8:30-8:45	Jens Wünsche	<i>Physiological, metabolic and molecular basis of biennial bearing in apple</i>
	8:45-9:00	Giora Ben-Ari	<i>Fruitlet abscission in olive</i>
	9:00-9:15	Carmina Reig	<i>Floral bud differentiation is temperature dependent in loquat</i>
	9:15-9:30	Mekjell Meland	<i>Effects of different crop loads and thinning times on fruit set, yield and fruit quality of 'Opal' plum in high tunnels</i>
	9:30-9:45	Jose Navas	<i>Flowering phenology and flower quality of cultivars Arbequina, Koroneiki and Picual in different environments of Southern Spain</i>
	9:45-10:00	Dragan Milatovic	<i>Determination of suitable pollinisers for the apricot cultivar 'Goldrich'</i>
	10:00-10:15	Giuseppe Lopriore	<i>Fruit set, yield and carpological characteristics of five almond cultivars as affected by different soil management in southern Italy</i>
10:15-10:30	Anton Milyaev	<i>Apple bud histology: a tool to study floral bud development in relation to biennial bearing</i>	
<b>10:30-11:00</b>	<b>Coffee Break</b>		
<b>Chair:</b> Gregory Reighard	<b>11:00-11:30</b>	<b>Manuel Agustí</b>	<b>Session IV: Horticultural management for the control of flowering, fruit set and alternate bearing</b> <b>Invited Lecture "Control of flowering, fruit set and alternate bearing in Citrus by means of plant growth regulators"</b>
	11:30-11:45	Frederic Normand	<i>Linking vegetative growth, reproduction and irregular bearing in the mango tree</i>
	11:45-12:00	Manuel Agustí	<i>Alleviation of alternate bearing in Citrus by means of mechanical pruning</i>
	12:00-12:15	Alon Samach	<i>Studying the effect of fruit load on floral induction and fruitlet abscission in olive and apple trees</i>
	12:15-12:30	Riccardo Lo Bianco	<i>Deficit irrigation does not affect alternate bearing of 'Valencia' orange trees</i>
<b>12:30-14:00</b>	<b>Lunch Break</b>		
<b>Chair:</b> Riccardo Lo Bianco	14:00-14:15	Peter Hirst	<i>Return bloom in apple is related to bourse length</i>
	14:15-14:30	Jolien Smessaert	<i>Can bumblebees increase fruit set and fruit quality of 'Conference' pear and 'Jonagold' apple?</i>
	14:30-14:45	Milica Fotiric Aksic	<i>Selection of the best pollinizer of 'Celina' pear</i>
	14:45-15:00	Sunnichan Veliyil George	<i>Effect of Mepiquat Chloride on flowering and fruiting in Rambutan variety N 18</i>
<b>15:00-16:00</b>	<b>General discussion, concluding remarks and ISHS best student awards</b>		
<b>16:00-17:00</b>	<b>Business Meeting</b>		
<b>20:00-24:00</b>	<b>GALA DINNER (<a href="#">Solemar Club</a>)</b>		

## FRIDAY 23 June 2017

POST-CONGRESS TOUR – Confirmation required (Email: <a href="mailto:info@fsab2017.it">info@fsab2017.it</a> ) - Cost of participation: 60€			
<b>7:30-19:00</b>	<b>7:30</b>	Departure from the Symposium venue – <a href="#">Department of Agricultural, Food and Forest Sciences, University of Palermo</a>	
	<b>9:00 – 10:30</b>	Visit of the experimental research unit ESA Carboj	
	<b>11:00 – 12:30</b>	Visit of an olive experimental farm at Piano Fusilli, Ribera	
	<b>13:30 – 15:00</b>	Lunch at <a href="#">Kolymbethra garden</a>	
	<b>15:00 – 17:00</b>	Visit of the <a href="#">Valley of the Temples</a> - Agrigento	
	<b>19:00</b>	Arrival at the Symposium venue – <a href="#">Department of Agricultural, Food and Forest Sciences, University of Palermo</a>	

## POSTER SESSIONS

<b>SESSION I: Genetics and genomics</b>	<b>SESSION III: Biology and environmental physiology</b>
<b>SESSION II: Environmental factors, endogenous interactions and phenoclimatic models</b>	<b>SESSION IV: Horticultural management for the control of flowering, fruit set and alternate bearing</b>

<i>Code</i>	<i>Session</i>	<i>Presenting author</i>	<i>Presentation title</i>	<i>Code</i>	<i>Session</i>	<i>Presenting author</i>	<i>Presentation title</i>
01	I	Costes Evelyne	Deciphering genetic and physiological determinants of alternate bearing in apple tree	21	III	Bartolini Susanna	Olive floral biology and climatic elements: twenty-five years of observations
02	I	He Xinhua	Identification of seedless related genes from Xiangshui lemon	22	III	Beppu Kenji	Effects of chilling exposure and heating temperature on bud burst and flowering of 'KU-PPI' peach trees
03	I	Herrera Lagranja Sara	S-RNase allele identification and incompatibility group assignment in apricot cultivars	23	III	Colda Agneta	Knowledge of the pollination process in pear to improve fruit set, yield and fruit quality
04	I	Li Jianguo	Anatomical, physiological and molecular studies on fruitlet abscission induced by carbohydrate stress in litchi	24	III	Fotiric Aksic Milica	Ovule and embryo size in different Oblačinska sour cherry clones after self and open pollination
05	I	Marchese Annalisa	Preliminary identification of self-incompatibility genotypes of Sicilian almond landraces	25	III	Herrera Lagranja Sara	Reproductive biology of pawpaw, the only species of the tropical and subtropical Annonaceae adapted to cold climates
06	I	Martinez-Gomez Pedro	Molecular cloning, expression and phylogenetic analysis of a related dormancy DAM gene in almond	26	III	Djuric Gordana	The dynamics of flowering of female and male inflorescences and pollen germination of hazel in the Banja Luka region
07	I	Meland Mekjell	Microsatellites as a tool for identifying successful pollinators of the pear cultivar 'Ingeborg' in Ullensvang, Norway	27	III	Lodolini Enrico Maria	Flowering time of 11 olive varieties in a high-density olive orchard in central Italy
08	I	Vashisth Tripti	Transcriptomic analysis of hydrogen cyanamide-treated peach trees	28	III	Lodolini Enrico Maria	Inflorescence characteristics and pollination compatibility of two local olive cultivars under high-density plantation conditions
09	II	Amico Roxas Adele	Seasonal changes in starch content in pistachio organs as related to crop load	29	III	Pisciotta Antonino	Millerandage and flower abscission in Grillo, Frappato and Nero d'Avola grapevines: some probable causes
10	II	Belaj Angjelina	Flowering characterization of 148 olive cultivars of the World Olive Germplasm Bank of IFAPA Córdoba, Spain	30	III	Pisciotta Antonino	Berry variability: causes and effects on the quality of cv Cabernet Sauvignon
11	II	Cronje Regina	Manipulation of litchi phenology using ethephon to mitigate changes in seasonal weather patterns in South Africa	31	III	Qiu Hongye	Study on endogenous hormones and nutrition substances of 'Sijimi' longan after pre-flowering treatments with growth regulators
12	II	Kallsen Craig	The interaction of air temperature-related variables with the alternate bearing cycle for predicting subsequent yield of 'Kerman' pistachio in the San Joaquin Valley of California	32	III	Rapoport Hava	Where do olive plants sense the cold requirements for flowering?
13	II	Muñoz Fambuena Natalia	The effect of fruit presence on mandarin bud sprouting and flowering in vitro	33	III	Stefanelli Dario	An innovative approach to estimate carbon status for improved crop load management in apple
14	II	Milatovic Dragan	Simple model for early prediction of flowering in apricot	34	III	Sup Kim Moon	Flowering and nectar characteristics of <i>Tilia amurensis</i> , <i>T. mandshurica</i> and <i>T. insularis</i>
15	II	Belhassine Fares	Multi-scale modeling of carbon and hormones fluxes for understanding alternate flowering in apple tree	35	III	Volo Placido	Early bearing and vegetative growth of 150 Sicilian olive accessions
16	II	Scalisi Alessio	Heat requirements for loquat fruit development may be assessed with a Beta model approach	36	IV	Cacioppo Ottavio	Pollination of kiwifruit: 30 years of applied research lead to a model system to study the interaction pollination-flowering stage
17	II	Vuletin Selak Gabriela	Onset of flowering in olive cultivars in relation to temperature	37	IV	Claessen Hanne	Cross-fertilisation, self-fertilisation and fruit set regulation in European pear ( <i>Pyrus communis</i> ) and their effect on fruit quality
18	II	Wenden Bénédicte	Exploration of the chill overlap model for a wide range of sweet cherry flowering data across European sites	38	IV	Crane Omer	Chemical thinning influence on 'Golden Delicious' apple fruit number in Israel
19	II	Yamanishi Kiyoshi Osvaldo	Macro and micronutrients in leaves of lychee trees ( <i>Litchi chinensis</i> Sonn.) cv Bengal in different phenological phases	39	IV	Ferguson Louise	Pistachio inflorescence bud abscission dynamics as a function of embryo weight, bearing status and vegetative growth
20	II	Yamanishi Kiyoshi Osvaldo	Behavior of leaf nutritional status on on- and off-year bearing trees of 'Bengal' litchi ( <i>Litchi chinensis</i> )	40	IV	Qiu Hongye	Effect of girdling on litchi leaf macroelements, chlorophyll and panicle growth

**POSTER INFO & LIST - The required format for posters has been changed to 80 x 110 cm.** Posters belonging to all the four sessions will be on display on the days 19<sup>th</sup> and 20<sup>th</sup> of June at Sala delle Capriate, Palazzo Chiamonte Steri, and will be discussed during the two poster sessions. Posters will be mounted on boards. Authors are kindly requested to use a pushpin to hang the poster. We will provide pushpins at the venue. Posters are requested to be removed after June 20 poster session. Don't remove posters before that. Remaining posters after June 20 will be permanently removed. Each poster presentation is associated with a code as shown in the following table. We kindly ask authors to pin the poster in the board area labeled with the relative code.