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Editorial

The summer went on in the North hemisphere, and sunflower performed quite well, even sometimes in difficult conditions due to climatic hazards.

We now begin an important period for ISA: 2020 will be the place of the 20th ISC International Sunflower Conference, in Novi Sad, Serbia, with several key steps:

The preparation of the conference is a heavy job for the organizing team and scientific committee, which will read, sort the proposed abstracts, and organize the sessions.

To prepare the General Assembly, we shall consult the ISA members for the attribution of the Pustovoit awards (see: http://isasunflower.org/presentation/pustovoit-awards.html ), and will have to think about the renewal of the Executive Board, etc,..

We also work for the launching of a new website, for the beginning of 2020, with improved and up-to-date functionalities, for both sharing scientific information and better interactions among the world sunflower community.

And we have not to forget to mobilize more widely the sunflower community with new members and new sponsors: to enlarge our vision at world scale and better understand the challenges the sunflower has to cope with, we need to share ideas between breeders, agronomists, pathologists, economists, people of process and industries… in order to better coordinate the efforts for the development of sunflower.

Etienne Pilorgé, ISA General Secretary-Treasurer

Activity and News of the association

20th International Sunflower Conference, Novi Sad, Serbia.

https://isc2020.com/program/program-overview/

Dear all,

You are kindly reminded that the deadline for the Online Abstract Submission for 20th ISC, October 20th 2019, is quickly approaching. We would like to thank to those of you who have already submitted their abstracts. If you haven’t managed submitting your abstract yet, please do so at your earliest convenience before the deadline.

The Scientific Committee will decide upon the acceptance of the contributions, based on the abstract. Only registered participants of the Conference may submit oral and/or poster contributions. Two Abstracts per one registered author will be accepted. If you require any further information, feel free to contact us at science@isc2020.com
Value chains and regional news

**Summer crops in Europe: relatively good behavior of sunflower**

According to the EU Commission MARS Bulletin published last Aug 27 ([https://ec.europa.eu/jrc/sites/jrcsh/files/jrc-mars-bulletin-vol27-no8.pdf](https://ec.europa.eu/jrc/sites/jrcsh/files/jrc-mars-bulletin-vol27-no8.pdf)), forecasts for maize and sunflowers in Europe remain above 5-year average. The yield outlook for sunflowers remains firmly above the 5-year average, with a 2019 forecast of 2.39t/ha at EU scale, 8.4% higher than the 5 years average of 2.21t/ha. Nevertheless, the results are contrasted depending on regions.

In France, all summer crop yields are forecasted close to a historical low; the French official service AGRESTE gives precisions: sunflower production is estimated at 1.3 Mt (+ 6.3% in one year and -2.1% compared to the 2014-2018 average), due to an increase of acreage by 9.2% in one year to reach 603 thousand hectares, but the yield dropped by 2.6% in one year to 22.1 q / ha. It is there 4% below the five-year average of 23 q / ha.

In Spain, for sunflower, usually non-irrigated, the yield outlook is just below average levels having suffered in the hot and dry conditions.

In central Europe, Hungary, Romania, Bulgaria, where precipitations were more abundant, sunflower crops performed rather well and expected yields are well above the 5 years average.
In Serbia, according to the field reports and observations available so far, the current year has been good for sunflower production. Compared to 2018 with 239,148 ha, sunflower harvested area slightly decreased and will be in the range of 220-230,000 ha. Yields are expected to be above 5-year average (2.83 t/ha) reaching above 3 t/ha and total production of approximately 660-690,000 t. In Ukraine, summer crops also present favorable biomass accumulation: the rain surplus observed in the south and east has favored the sunflower crop and a record yield is foreseen.

USA: 2019 sunflower acreage

The National Sunflower Association reported the update of the USDA plantings report, (http://www.sunflowernsa.com/magazine/articles/default.aspx?ArticleID=3848 ) dated Aug 12: the USDA’s Farm Service Agency released updated figures on 2019 planted acreage. August acreage numbers, by state, were as follows: California — 15837 ha; Colorado — 21216 ha; Kansas — 14717ha; Minnesota — 21762ha; Nebraska — 2582ha; North Dakota — 209420ha; South Dakota — 205978ha; Texas — 10577ha. The FSA report also listed 16143ha acres of sunflower being planted in “Other” states.

The total acreage for oil-type sunflower was slightly less than 469500 ha (including 11400 in “Other” states). The total for nonoil sunflower planted acres in August was just under 58679 ha (including 4747 in “Other” states).

Publication: the California Hybrid Seed Production Manual

The US NSA reported the recent publication of the California Hybrid Seed Production Manual (https://anrcatalog.ucanr.edu/Details.aspx?ItemNo=8638 ) by a team of researchers of the University of California and Tom Gulya, ISA Honorary Member retired from USDA. The manual provides information on production needs, such as irrigation and nutrient management, as well as a color guide to insect pests, diseases and weeds of concern for hybrid sunflower seed production, says the NSA news.
EU Protein balance sheet and Oilseeds balance sheet

**Book: Studies of Sunflower in the Republic of Moldova**, 2018, Chisinau, by Maria Duca. In Romanian. « The book proposes a review of the results of the scientific research in Moldova. The first chapter highlights the historiography of the production of sunflower in culture. The other chapters are selective bibliographic studies based on the analysis of the most relevant scientific papers – monographs, collections, articles published in national and international journals, conferences and symposiums, practical recommendations, etc... At the end of the book are presented patents, doctoral and doctor habilitat thesis with sunflower study. »

**Scientific news**

*We remind all our readers that they can contribute to this bibliography chapter by informing us about their recent publications, if possible, with an internet link or contact.*

**Publications**

**GENETICS AND BREEDING**


Resistance to Phomopsis Stalk Canker and Sclerotinia, in a High-Yielding and High-Oil Background. J. Plant. Reg. 0. https://doi.org/10.3198/jpr2019.02.0008crg


Pre-Print: Tyler Parks, Yordan S. Yordanov. Composite plants for a composite plant: An efficient protocol for root studies in the sunflower using composite plants approach. bioRxiv https://doi.org/10.1101/712760


Jennifer R. Mandel, Rebecca B. Dikow, Carolina M. Siniscalchi, Ramhari Thapa, Linda E. Watson, and Vicki A. Funk. A fully resolved backbone phylogeny reveals numerous dispersals and explosive diversifications throughout the history of Asteraceae. PNAS. https://doi.org/10.1073/pnas.1903871116

PATHOLOGY / CROP PROTECTION


Preliminary study. COST INDEPTH Prague Meeting, February 24-27, 2019, Prague, Czech Republic, p. 90.


Juanjuan Li, Chong Yang, Hui Liu, Mengting Cao, Guijun Yan, Ping Si, Weijun Zhou, Ling Xu. 5-aminolevulinic acid enhances sunflower resistance to Orobanche cumana (Broomrape), Industrial Crops and Products, 2019, https://doi.org/10.1016/j.indcrop.2019.111467


Jarrad R. Prasifka. **Cochylis hospes** (Lepidoptera: Tortricidae) damage to male lines varies significantly and inbred susceptibility predicts damage to hybrids. The Canadian entomologist 2019. [https://doi.org/10.4039/txe.2019.48](https://doi.org/10.4039/txe.2019.48)

**AGRONOMY**


Stepanova, L.P. Boltushkin, D.M. Koren'kova, E.A. Yakovleva, E.V. et al. Evaluation of sunflowers varieties for their precocity and productivity in the Orel region [2018](Russian)  


S. Gad et al (book chapter Precision agriculture ’19) Early detection of corn and sunflower stress induced by chemical spraying. https://doi.org/10.3920/978-90-8686-888-9_34


PHYSIOLOGY


Raúl González Belo, Leonardo Velasco, Susana M. Nolasco, Natalia G. Izquierdo. Oil Phytosterol Concentration in Sunflowers Presents a Dilution Response with Oil Weight per Grain. AOCS. https://doi.org/10.1002/aocs.12265


PROCESS AND PRODUCTS


Mokhtar Dabbour, Ronghai He, Benjamin Mintah, Jiahui Xiang, Haile Ma, Changes in functionalities, conformational characteristics and antioxidative capacities of sunflower protein by controlled enzymolysis and ultrasonication action. Ultrasonics Sonochemistry,2019. https://doi.org/10.1016/j.ultsonch.2019.104625


Carole Delavaud, Hélène Fougère, Yves Chilliard, Laurence Bernard. The dietary addition of fish oil or sunflower oil plus starch differently modulates the lipid classes in plasma of lactating cows and goats. Lipid Science. https://doi.org/10.1002/elt.201900075


Dimitris Kareyllakis, Atze Jan van der Goot, Constantinos V Nikiforidis, Multicomponent emulsifiers from sunflower seeds, Current Opinion in Food Science, 2019, https://doi.org/10.1016/j.cofs.2019.07.005


https://books.google.fr/books?hl=fr&lr=&id=lsqnDwAAQBAJ&oi=fnd&pg=PA281&dq=sunflower&ots=Sp


ECONOMY AND MARKETS


Coming International and national events


**20\(^{th}\) International Sunflower Conference, Novi Sad**

**Registration:**
- Early fee deadline: 20 October 2019
- Regular fee deadline: 20 May 2020
- On site fee: from 21 May 2020

**Abstract Submission Deadline:** October 20, 2019

*We invite all the persons who read this newsletter to share information with the Sunflower community: let us know the scientific projects, events organized in your country, crops performances or any information of interest for sunflower R&D.*

**Contact ISA Newsletter:**

Etienne Pilorgé, ISA Secretary-Treasurer: e.pilorge@terresinovia.fr

Or: [contact@isasunflower.org](mailto:contact@isasunflower.org)

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**Join ISA**

**Why should you join ISA?**

You are interested in sunflower research and development

You wish to share points of view and exchange information with colleagues from all over the world,

You wish to be informed of the latest news about sunflower,

You will benefit from premium registration fees to attend our International Sunflower Conferences and Sunflower Symposia

You will get free access to Helia scientific review

To become a member of ISA, you are requested to fill a registration form on line and pay annual membership fees (70€)

Contact: Laetitia Devedeux l.devedeux@terresinovia.fr

Or [contact@isasunflower.org](mailto:contact@isasunflower.org)