GCIRC News

Global Council for Innovation in Rapeseed and Canola

"Building a World Community for Innovation on Rapeseed and Canola"

N° 8, September 2020

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Editorial

Despite the prevailing Corona virus COVID 19, we still expect that the next GCIRC Technical Meeting (TM) will be organized and held in 2021 by our Polish colleagues headed by Prof. Dr Iwona Bartkowiak-Broda (see below). We plan to provide the most important information on the program plan and venue in the next month or two (see Newsletter n°9).

Lasting Covid pandemics and changed work habits with extended use of telework and web-conferences may help to promote continuous interactions necessary to facilitate the preparation of "on site events" such as the TM 2021.

At this time, we want to inform you that the two main topics for TM 2021 will be sustainable insect management and improvement and use of rapeseed proteins. As usual, ample time will be made available for presenting current work and results from all other topics related to the GCIRC research area.

We have in mind to strengthen the role of the GCIRC Committees in structuring and presenting research relevant for the improvement and broader use of rapeseed on a broader scale (further details will be introduced in the next newsletter n°9).

We are happy to announce that a couple of respected international experts have joined GCIRC since the IRC 2019. To further improve the visibility of GCIRC and extend its membership, we kindly ask you to advertise for our community and the recruitment for new members, strengthening the power and impact of GCIRC in the scientific world and whole rapeseed community.

The GCIRC Executive Board

Activity/ News of the association:

Proceedings of Berlin Congress online

The proceedings (abstracts and available presentations and posters) of the 15th IRC in Berlin, 2019, are now available to GCIRC members.
You can still send your presentations slides or posters, as pdf files, to contact@gcirc.org .

GCIRC Technical Meeting 2021

The next GCIRC Technical meeting is scheduled May17-21, 2021 in Poznan, Poland. Two main topics for the future of the rapeseed/canola competitiveness will be highlighted: Sustainable Insect Pest Control, and Valuable Vegetable Proteins from Rapeseed.

Contact data of the meeting organizers: Plant Breeding and Acclimatization Institute, National Research Institute (IHAR-PIB), ul. Strzeszyńska 36, 60-479 Poznań (Poland), phone: +48 61 8233 721, e-mail: I.Bartkowiak-Broda@ihar.edu.pl, http://www.ihar.poznan.pl/

Welcome to New GCIRC members

Welcome to the new members who joined GCIRC since our last newsletter in April:

Name	Institution	Country	Date
Patrick CARRE	Iterg	FRANCE	April 2020
Jose MOUAT	OLEOTOP SA	CHILE	June 2020
Christer PERSSON	Jerrestad Agro AB	SWEDEN	June 2020
Olivia GARCIA	Agro Innovation International	FRANCE	July 2020
Curtis REMPEL	Canola Council of Canada	CANADA	August 2020
Christian JUNG	University of Kiel	GERMANY	August 2020

You may visit their personal page on the GCIRC website directory, to better know their fields of interest.

We take this opportunity to remind all members that they can modify their personal page, especially indicating their fields of interest in order to facilitate interactions.

Value chains and regional news

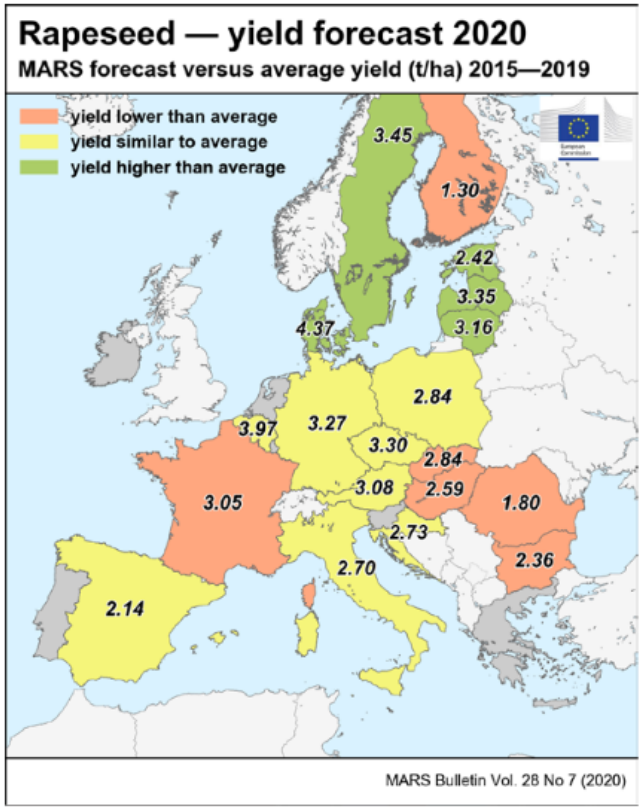
- **2020 yields and production**

In **European Union**, the 2020 rapeseed yield is expected to reach 2,97t/ha, almost 4% below the 5 years average. Main producing countries show depleted yields due to climate conditions (-3,5% in Germany, -8,5% in France), excepted Poland with + 2,8%. UK also showed yields below the average (-5,5%). Yields were generally good in Northern Europe. COCERAL estimated the total European production at 16,960 Mt, like 2019 production (Coceral August 2020 estimates, for EU27+UK).
In **Ukraine**, yields for rapeseed and winter crops in general are well below the historical trend, with a drop of -1 Mt to 2.5 Mt in rapeseed production being expected in 2020.
In **Canada**, according to Agriculture Agri Food Canada, seeded area in Canada was estimated by Statistics Canada to have fallen marginally to 8.4 million hectares (Mha), as farmers shifted into wheat and coarse grains away from oilseeds. AAFC forecasts a harvested area of 8.3 Mha for canola. Yields are projected at 2.27 tons per hectare (t/ha), up marginally based on 5-year

average yields. The yield estimates were supported by generally good growing conditions across the key growing regions although the maturing crop was stressed by hot and dry weather, leading to some premature ripening.

In **Australia**, the production is expected to return close to the 10-year average to 2018–19, reflecting the forecast increase in planted area and an expected increase in yields. Latest production estimate of ABARES was very positive with the forecast of an Australian canola production at 3.42 Mt against 2.43 Mt last year.

Country	Rape and turnip rape (t/ha)				
	Avg 5yrs	2019	MARS 2020 forecasts	%20/5yrs	%20/19
EU	3.08	2.96	**2.97**	- 3.8	+ 0.2
AT	3.08	2.98	**3.08**	- 0.2	+ 3.2
BE	3.87	3.52	**3.97**	+ 2.6	+ 13
BG	2.76	2.83	**2.36**	- 14	- 17
CY	—	—	—	—	—
CZ	3.26	3.05	**3.30**	+ 1.4	+ 8.4
DE	3.39	3.30	**3.27**	- 3.5	- 0.9
DK	3.92	4.40	**4.37**	+ 12	- 0.9
EE	2.14	2.64	**2.42**	+ 13	- 8.5
EL	—	—	—	—	—
ES	2.10	2.13	**2.14**	+ 1.7	+ 0.4
FI	1.49	1.33	**1.30**	- 13	- 2.0
FR	3.33	3.13	**3.05**	- 8.5	- 2.6
HR	2.78	2.51	**2.73**	- 1.9	+ 8.7
HU	3.08	2.97	**2.59**	- 16	- 13
IE	—	—	—	—	—
IT	2.60	2.66	**2.70**	+ 3.9	+ 1.8
LT	2.73	2.85	**3.16**	+ 16	+ 11
LU	—	—	—	—	—
LV	2.75	2.93	**3.35**	+ 22	+ 14
MT	—	—	—	—	—
NL	—	—	—	—	—
PL	2.77	2.71	**2.84**	+ 2.8	+ 4.8
PT	—	—	—	—	—
RO	2.57	2.04	**1.80**	- 30	- 12
SE	3.18	3.62	**3.45**	+ 8.6	- 4.7
SI	—	—	—	—	—
SK	3.02	2.84	**2.84**	- 5.8	+ 0.0
UK	3.55	3.31	**3.36**	- 5.5	+ 1.5



Source: MARS Bulletin July 2020 https://ec.europa.eu/jrc/sites/jrcsh/files/jrc-mars-bulletin-vol28-no7.pdf

In **India**, in the newsletter Globoil Post, dated Aug 23, 2020, GG Patel, Chairman of the oil industry GGN Group gives a guesstimate of Rabi Rapeseed crop at 78 Lac tons (7,8Mt) against previous year's 73 Lac tons (7,3MTt. Looking at good prices and above average rainfall).

In **China**, USDA global market analysis (Aug 2020) forecasted a stable production of rapeseed at 13,2Mt for 6,65Mha.

- **Europe: Avril and DSM sign an alliance in rapeseed protein for human consumption**

Avril, a French industrial and financial player in vegetable oils and proteins, and Royal DSM, a Dutch nutrition and health specialist, announced on July 15 that they had finalized an alliance

in rapeseed protein for human consumption. This project, on the industrial site of Dieppe (France), aims at the production and marketing of rapeseed protein isolate via a joint company, OLATEIN, owned by Avril (25%) and DSM (75%). Work is scheduled for the summer to start production "in the first quarter of 2022". This new activity offers "alternatives to meat and dairy products", underlined the president of DSM Food Specialties Patrick Niels, quoted in a press release.
Avril will thus provide OLATEIN with the raw material for extraction: non-GMO fatty meals, rich in proteins, from the new crushing unit that will be created on the site. The last component of this alliance, a biomethane production unit which will help supply the local public network and reduce the site's environmental footprint.

- **Europe: Safety of rapeseed powder from Brassica rapa L. and Brassica napus L. as a Novel food pursuant to Regulation (EU) 2015/2283**

Following a request from the European Commission, the EFSA Panel on Nutrition, Novel Foods and Food Allergens (NDA) delivered an opinion on the safety of rapeseed powder from *Brassica rapa L*. and *Brassica napus* L. as a novel food (NF). The product comes from the seeds of non-genetically modified double low (00) cultivars, processed to reduce the content of glucosinolates and other undesirable compounds like phytates. See: https://doi.org/10.2903/j.efsa.2020.6197

- **Europe: Statement complementing the EFSA Scientific Opinion on application (EFSA-GMO-NL-2009-75) for placing on the market of genetically modified oilseed rape Ms8 × Rf3 × GT73 and sub combinations, which have not been authorized previously**

Following an application of Monsanto, the EFSA European Food Safety Authority published the conclusions of the experts Panel on GMOs regarding the extension of the risk assessment of genetically modified oilseed rape Ms8× Rf3× GT 73 to its sub combinations for feed and food uses import and processing, with the exception of isolated seed protein for food. “The GMO Panel concludes that food and feed containing, consisting, and produced from genetically modified oilseed rape Ms8 × Rf3 × GT73 and its sub combinations Ms8 × GT73 and Rf3 × GT73, are as safe as its conventional counterpart.

See: EFSA Panel on Nutrition, Novel Foods and Food Allergens, 2020. Safety of rapeseed powder from Brassica rapa L. and Brassica napus L. as a Novel food pursuant to Regulation (EU) 2015/2283 (NDA) https://doi.org/10.2903/j.efsa.2020.6200

- **Canada: new GMO Canola for long chain Omega 3**

Reported by Canola Quick Bytes (https://www.uscanola.com/newsletter/canola-quick-bytes-september-2020/): A new genetically modified canola variety producing long-chain omega-3 oil has been developed by Nuseed as an alternative to fish oil in aquafeed and approved to be grown and consumed by humans and fish in Canada.

- **A new PCR test to detect GMO obtained by genome editing** *(sources: AFP, Foods)*

Debates regarding the regulatory status of genome-edited crops, recognized as a GMOs by the Court of Justice of the EU, has focused on precision of editing and doubts regarding the feasibility of analytical monitoring compliant with existing GMO regulations, since until now there was no proper analytical methods.

A consortium led by the Health Research Institute (Iowa, United States) has developed a new process to detect this kind of new generation GMO, on the first variety of canola designed by genome editing by the American firm Cibus and commercialized in North America. The study, published in the scientific journal Foods describes a real-time molecular PCR test, like those used in laboratories to monitor "classic" GMOs. It was funded by NGOs such as Greenpeace, associations, and SPAR, the main retail chain in Austria.

This new process will allow the EU to enforce its GMO regulations and "GMO-free" certification bodies to ensure that products do not contain GMOs. According to Yves Bertheau, specialist in GMOs at Inrae (France), the new test "is operational, it will be able to be used at no additional cost by control laboratories and fraud repression services".

See: Chhalliyil, P.; Ilves, H.; Kazakov, S.A.; Howard, S.J.; Johnston, B.H.; Fagan, J. A Real-Time Quantitative PCR Method Specific for Detection and Quantification of the First Commercialized Genome-Edited Plant. Foods 2020, 9, 1245. https://doi.org/10.3390/foods9091245

- **USA: Lesquerella seen as bioethanol source by USDA-ARS**

Lesquerella (a.k.a. Fendler's bladderpod and Yellow Top) is a member of the mustard family that's native to the U.S. Southwest. Agricultural Research Service (ARS) scientists are now eyeing it as a home-grown source of butanol. See: https://content.govdelivery.com/accounts/USDAARS/bulletins/29a1921

Scientific news, publications

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Upcoming International and national events

1-3 December 2020: Canola Week

https://www.canolacouncil.org/what-we-do/upcoming-events/

17-20 May 2021: GCIRC Technical Meeting, Poznan, Poland.

20-24 June 2021. Industrial crops and products unlocking the potential of bioeconomy
32nd Annual Meeting AAIC Association for the Advancement of Industrial Crops. Bologna, Italy. https://www.aaic2020.com/ *(initially sept 2020)*

4-7 July 2021, Nantes, France ISSFAL Congress International Society for the Study of Fatty Acids and Lipids (ISSFAL)
https://www.issfalcongress.com/

25-29 July 2021, SIP 2020, Symposium on Insect-Plant Interactions, Leiden, The Netherlands
https://www.universiteitleiden.nl/sip2020

September 2021: Brassica 2020 postponed to 2021: Brassica 2020+1, Saskatoon, Canada
http://cruciferseq.ca/Brassica2020

Beginning of October 2021 IOBC-WPRS Working Group "Integrated Control in Oilseed Crops", Rennes, France. http://www.iobc-wprs.org/events/20200929_IOBC-WPRS_WG_ICOC_Rennes_2020_flyer.pdf

September 24-27, 2023 16th International Rapeseed Congress, Sydney, Australia
www.irc2023sydney.com

We invite you to share information with the rapeseed/canola community: let us know the scientific projects, events organized in your country, crop performances or any information of interest in rapeseed/canola R&D.

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