GCIRC News

Global Council for Innovation in Rapeseed and Canola

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

N° 17, February, 2025

Table des matières

Editorial

Welcome to 2025, a year that hopefully is full of good health and prosperity for all.

Our thoughts continue to go out to the people of Ukraine, and particularly our colleagues in agriculture, the devastation and destruction has been going for way too long.

World production of rapeseed/canola again experienced challenges globally, whether it be climatic conditions impacting both northern and southern hemispheres, increasing production costs, or softer grain prices. I look forward to reviewing regional crop reports and forecasts for the current crop in our next newsletter.

Focus is on the upcoming GCIRC Technical Meeting and field tour being held in Cambridge, UK 8th–10th April 2025. A great program is shaping up nicely under the theme of "Climate Change" covering – adapting agronomy, managing pests and diseases, delivering greenhouse gas reduction. Many thanks to Colin Peters/NIAB for his dedication to deliver this event. Registration numbers are rising, so don't forget to register and be part of TM2025.

A GCIRC General Assembly will be held during the Technical Meeting, and this is where the board for the next 4-year term will be nominated and accepted. Many thanks to current board members who have indicated they will be continuing as their countries representative. Remember all GCIRC members are welcome and invited to attend.

With IRC-2027 only two years away, now it is a good time to put this pre-eminent Global Congress on your calendar. The 17th International Rapeseed Congress to be held in Paris, France in April 2027. I understand planning and preparing is well under way and good progress to date.

Looking forward to seeing many of you in Cambridge in April, safe travels.

Robert Wilson, GCIRC President

Activity/ News of the association

GCIRC Website

GCIRC members email addresses were visible to all on the GCIRC website as "Name(at)site.xx," to avoid robots to pick them, but it was obviously insufficient.

Many GCIRC members were proposed to buy "the GCIRC mailing list" by "parasitic actors", and sometimes were submitted to more malicious and dangerous attempts (e.g. messages asking money sent under the name of our president or other members "in difficulty"", or recently attempts to sell false tickets for our technical meeting, etc…). We finally decided that members' email addresses will be totally hidden for non-GCIRC members to avoid spamming and phishing. These addresses will remain available for members only under their login with their personal passwords. Telephone numbers are still visible to all: so, remain vigilant on that channel and do not hesitate to inform us (contact@gcirc.org) in case of malicious attempts.

GCIRC Technical Meeting in Cambridge, UK, April 8-10

The GCIRC Technical Meeting will take place in Cambridge, UK, on next April 8th to 10th, 2025.

The local organization is managed by Colin Peters and his colleagues of NIAB. The older GCIRC members will remember the 9th International Rapeseed Congress, which was organized in Cambridge in July 1995, at a time when the first rapeseed hybrids were just appearing. Almost 30 years since then.

The overall theme is on Climate Change – adapting agronomy, managing pests and diseases, delivering greenhouse gas reduction.

A field tour will precede the indoor sessions, on Tuesday April 8th: the participants will visit the English Mustard Growers farm at Thorney, Peterborough (see program on GCIRC website/news). Wednesday 9th and Thursday 10th will be devoted to indoor sessions at Jesus College Cambridge, including oral presentations and posters. A special panel session on Gene editing is scheduled on Wednesday afternoon: How can science and policy work together to facilitate the uptake of precision-bred crops?

It will be followed by the traditional Gala Dinner, in Jesus College.

The GCIRC General Assembly will be on Wednesday 9th.

Detailed programme and registrations are available on the GCIRC website. Participants limited to 130 persons.

17th IRC International Rapeseed Congress, Paris, April 18th to 21st, 2027

Save the dates!

The 17th International Rapeseed Congress (IRC) will take place in Paris, France, from April 18th to 21st, hosted by Terres Inovia, the French oilseed technical Institute, and the professional organizations of the French oilseeds sector, under the auspices of the GCIRC (Global Council for Innovation in Rapeseed and Canola).

The “Palais des Congrès de Paris” is an ideal destination to host the World Rapeseed Congress in 2027. Located at Porte Maillot, near the famous Champs Elysées, it is well connected to public transports and airports, and offers high flexibility for the congress sessions, exhibition and side events.

Technical visits will be organized before the core part of the congress. Several options will be studied in regions easily accessible from Paris. It would include visits of agronomical research platforms, including pluriannual cropping system experiments, industrial units and research labs.

The organization committee is active for more than one year now, and the scientific committee is under construction.

Oilseed rape-Canola hybrid story

Our colleague Yves Devisme has been working in the seeds industry for several decades, presently for NPZ, and proposed to GCIRC a project consisting in writing the history of the emergence of rapeseed/Canola hybrids, which was a complex story mobilizing research and development with a series of successes, failures, imaginative solutions…

The GCIRC Board gave its greenlight to this project with the target to involve the different countries which were active in rapeseed/canola/mustard hybrids research and development.

The scope of the project is to collect and summarize all the information available on the development of Canola/OSR hybrids across the world, with the aim to have a global summary finalized for the next IRC Congress 2027 in Paris, with the possibility in between to release finalized parts. More details will be given at the Technical Meeting in Cambridge, and on the website.

Welcome to New GCIRC members

Since May 2024 we have welcomed twenty-four new members:

2024			
RAHMAN	Habibur	University of Alberta	CANADA
RAJKOVIC	Dragana	IFVC	SERBIA
MILOVAC	Zeljko	IFVC	SERBIA
DEVISME	Yves	NRZ	GERMANY
STOTZ	Henrik	University of Hertfordshire	UNITED KINGDOM
2025			
MUDAU	Colleen	Le Mans University	FRANCE
VAINOLA	Anu	BOREAL	FINLAND
NELSON	Matthew	CSIRO	AUSTRALIA
KING	Kevin	Rothamsted Research	UNITED KINGDOM
BONDAD	Jamina Gabrielle	CSIRO	AUSTRALIA
VYSHNIVSKYI	Petro	National university of life and environmental sciences	UKRAINE
THORSTED	Marian	SEGES Innovation	DENMARK
WU	Pei-Chen	KWS UK Ltd.	UNITED KINGDOM
KIHLSTRAND	Anneli	SFO	SWEDEN
VOLKMANN	Susann	KWS SAAT SE & Co. KGaA	GERMANY
KONRADYOVA	Veronika	University of Life Sciences Prague	CZECH REPUBLIC
HOLZENKAMP	Karin	KWS SAAT SE & Co. KGaA	GERMANY
MUQADDASI	Quddoos ul-Haq	KWS SAAT SE & Co. KGaA	GERMANY
GORLEOV	Artem	KWS SAAT SE & Co. KGaA	GERMANY
WELLS	Rachel	John Innes Centre	UNITED KINGDOM
RIZVI	Masood	NRGENE Canada	CANADA
RIQUET	Gwénola	TERRES INOVIA	FRANCE
ROBERT	Céline	TERRES INOVIA	FRANCE
MATUSZCZAK	Marcin	IHAR	POLAND

In the meantime, eight persons left the association, two of them for retirement.

You may visit their personal pages on the GCIRC website directory, under your login, 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.

Professor Folkhard ISERMEYER

We are deeply saddened to inform of the passing of Prof Folkhard Isermeyer and express our sympathy to his family, friends and colleagues.

Prof. Isermeyer passed away on 14 January 2025, shortly after his 67th birthday, after a serious illness. He was due to be officially retired in March 2025, but unfortunately was no longer able to enjoy it.

Prof. Isermeyer joined the UFOP advisory board in 2005 and, as a leading agricultural economist, advised UFOP for almost 20 years. Together we can look back on projects and measures that were the result of his suggestions and proposals, such as the 'agribenchmark' project. This gave UFOP access to an international network and thus to information for an appropriate classification of the competitiveness and future challenges for German and European oilseed producers. At the beginning of 2024, he retired from the UFOP committees.

Prof Isermeyer was long involved in the Economy Committee of GCIRC, from 2008 to 2020, to ensure that the economic viability of oilseed cultivation was also discussed, for example in a workshop on this topic at the IRC 2019 in Berlin.

GCIRC, as UFOP, is most grateful to Prof. Isermeyer, for the time he gave us over the years with a professional and personal commitment, contributing to the quality and success of these associations.

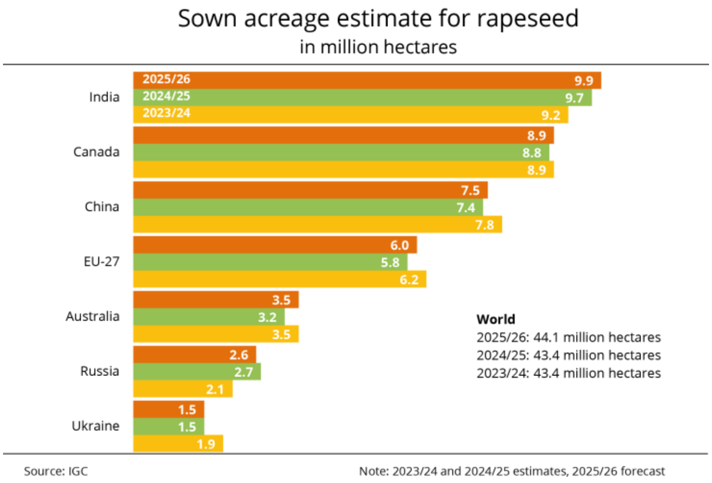
Value chains and regional news

World rapeseed Canola production

The latest USDA oilseeds reports ***(Feb 2025; https://www.fas.usda.gov/data/oilseeds-world-markets-and-trade-02112025*** *)* estimates the rapeseed supply to 85.31 MT for the 2024/25 commodity season, 4.6% below the previous season, but 3% higher than the average of the ' previous campaigns. Globally, rapeseed is still progressing and represents 12.6% of the global oilseeds production.

IGC projects marginal increase in global rapeseed area for the 2025 harvest Source UFOP Chart of the week 48/2024 Dec 2024 ***(https://www.ufop.de/english/news/chart-week/#kw04_2025)***
"Whereas the rapeseed area in Russia is expected to decline, acreages in the EU-27, Australia, Canada, India, and the US are likely to record increases.

The International Grains Council (IGC) has forecast the global rapeseed area for the 2025/26 marketing season at 44.1 million hectares. This translates to a 1.4 per cent rise compared to the current season and would be the largest rapeseed area on record. The EU's output available for the 2024/25 season was significantly limited due to reductions in area and disappointing yields. EU farmers are now anticipated to have expanded their production areas nearly 4 per cent to 6.0 million hectares. According to the IGC, the expansions are mainly driven by attractive prices.



The outlook for rapeseed production in the major exporting nations is currently still uncertain. In India, conditions for sowing and germination in the country's most important rapeseed producing region Rajasthan are defined by drought. What is more, the rapeseed area has declined an estimated 7.2 per cent, falling to 3.12 million hectares.

In Canada and Australia, current expectations suggest expanded production areas in both countries – provided demand remains steady. In the US, an 8.3 per cent increase in rapeseed area is also considered possible. According to research by Agrarmarkt Informations-Gesellschaft (mbH), the rise would be based on growing demand from the fuel sector as a consequence of the US Environmental Protection Agency's (EPA) decision to promote biofuels for road and air traffic. In mid-2024, the EPA approved the use of rapeseed oil as a feedstock for biofuels production, which approval has led to a strong rise in rapeseed imports."

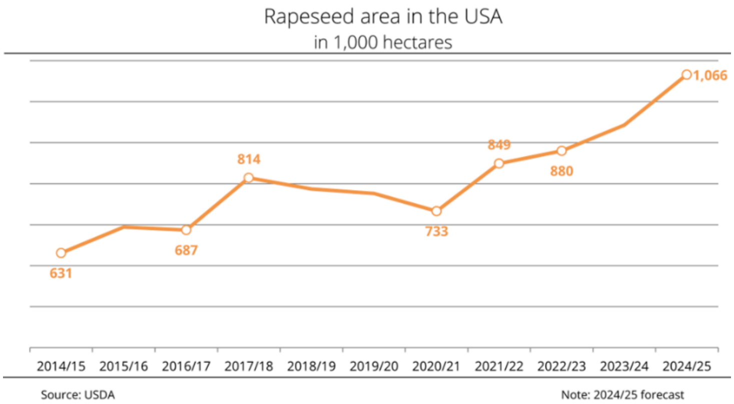
We may wonder how this dynamic might be hampered or disrupted in case the new US administration would alleviate or cancel this EPA policy promoting biofuels or decide taxes on imported oilseed or their transformed products. Investments in some processing units in Canada seem to be at a standstill, waiting for more visibility on US policies and markets.

USA

UFOP Chart of the week 39/2024 was reporting that Canola production in the US is booming, the US biofuel market experiencing dynamic growth, making canola cultivation increasingly attractive for farmers in the northern US and benefiting also to Canadian counterparts.

But according to US Canola, Biofuels based on Canola are now the object of disappointing evolutions of regulations since the early beginning of 2025: "the U.S. Department of Energy released an updated model to calculate tax credit values based on emissions rates of feedstocks and pathways for biodiesel,

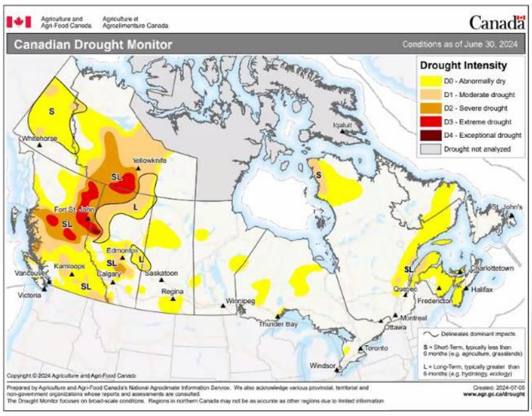
renewable diesel, Sustainable Aviation Fuel, renewable propane and naphtha. In this model, results for canola are very poor and therefore would not generate any tax credit in most cases". Despite the more positive evaluation of the Environment Protection Agency.
In the meantime, from the canola seeds production point of view, as reported by USDA, canola production in 2024 was a record high of 2.19 MT, up 13% from 2023. The average yield, at 2 T/ha, is down slightly from the previous year's average but it is the sixth highest on record. Planted area was 1.112 million ha, 13% above 2023 and exceeding 1 million hectares for the first time.
(*source US Canola, Canola Quick Bytes Feb 2025 (https://www.uscanola.com/newsletter/canola-quick-bytes-february-2025/*)

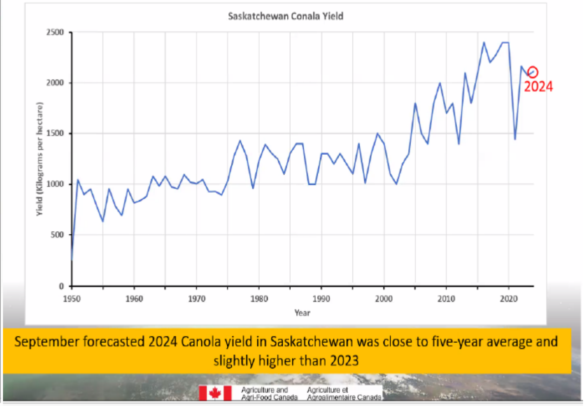


All of the key canola-producing states in the US have expanded their cultivation areas. North Dakota accounts for the lion's share of 830,000 hectares. The state is followed by Montana and Washington, each with around 80,000 hectares, and Idaho and Minnesota, each with about 38,000 hectares. Notably, the canola areas in North Dakota, Montana and Washington have all risen to record highs.

Canada

The 2024 Canadian harvest is down 1.1% compared to 2023: seeded area decreased by 0.4% and yield by 0.8%: the total Canadian 2024 production reaches 18.98 MT for 8.9 Mha and 2.15 T/ha. Yield were depressed compared to 2023 in Manitoba (-7%) with very variable yields, and Alberta (-2%) and slightly progressed in Saskatchewan (+2%). The canola season began with generally low soil moisture, as a consequence of low precipitations in 2023 season and then fall and winter. Then most areas of the Prairies received above normal precipitation in spring, with cool temperatures in May allowing moisture to sink into the top layer of soils. Little drought was remaining at the end of June, except in Alberta. The summer was around normal precipitations.
Finally, 2024 yields are still in a ten-year growing trend.
(source: Canola Week 2024 seasonal reports)



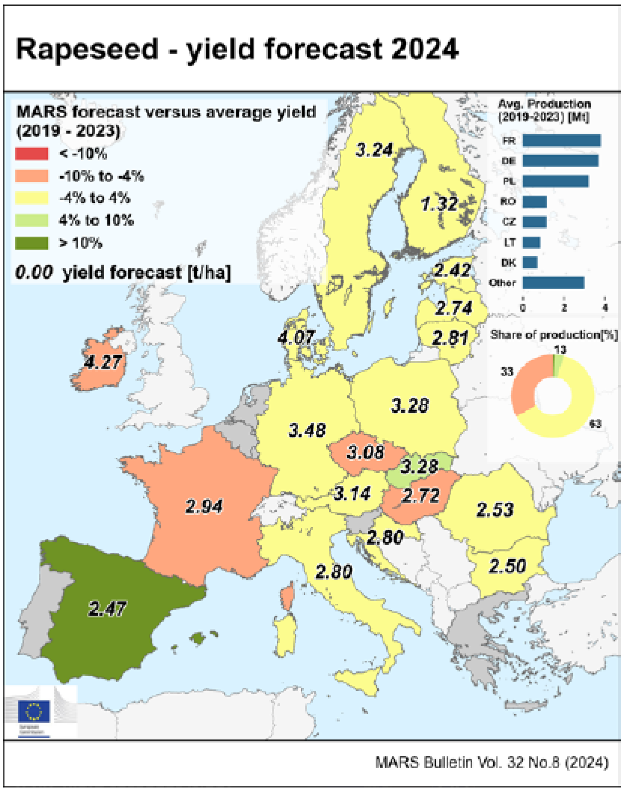


Europe

Source JRC MARS Bulletins Crop monitoring in Europe. Vol. 32 No 8, August 2024

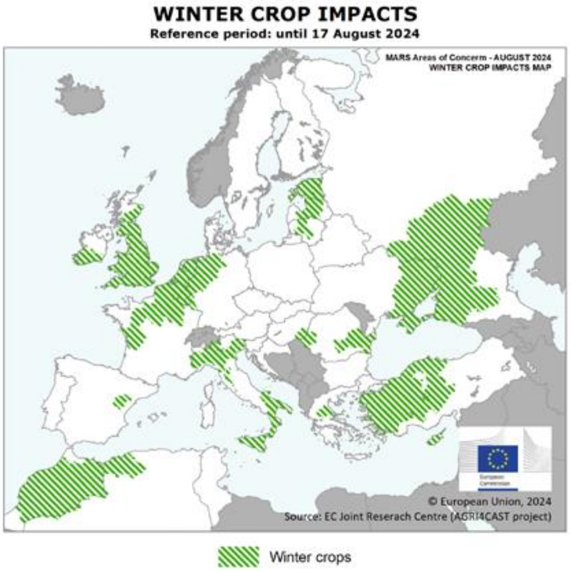
https://op.europa.eu/en/publication-detail/-/publication/0d43cc99-6421-11ef-a8ba-01aa75ed71a1/language-en

Country	Rape and turnip rape (t/ha)					
	Avg 5yrs	2023	MARS 2024 forecasts	%24/5yrs	%24/23	% Diff August/July
EU	3.17	3.17	**3.07**	-3	-3	-1
AT	3.11	3.23	**3.14**	+1	-3	-2
BE	—	—	—	—	—	—
BG	2.57	2.58	**2.50**	-3	-3	+0
CY	—	—	—	—	—	—
CZ	3.25	3.45	**3.08**	-5	-11	+0
DE	3.62	3.58	**3.48**	-4	-3	-1
DK	4.14	3.90	**4.07**	-2	+5	+0
EE	2.51	1.80	**2.42**	-4	+34	-9
EL	—	—	—	—	—	—
ES	2.13	1.62	**2.47**	+16	+53	+0
FI	1.30	1.31	**1.32**	+1	+1	+0
FR	3.26	3.17	**2.94**	-10	-7	+0
HR	2.70	2.82	**2.80**	+4	-1	+0
HU	2.89	3.27	**2.72**	-6	-17	+0
IE	4.50	4.33	**4.27**	-5	-1	+0
IT	2.82	2.71	**2.80**	-1	+3	+0
LT	2.87	2.67	**2.81**	-2	+5	-4
LU	—	—	—	—	—	—
LV	2.68	2.35	**2.74**	+2	+16	-2
MT	—	—	—	—	—	—
NL	—	—	—	—	—	—
PL	3.20	3.39	**3.28**	+3	-3	-0
PT	—	—	—	—	—	—
RO	2.58	2.63	**2.53**	-2	-4	+0
SE	3.21	2.51	**3.24**	+1	+29	+0
SI	—	—	—	—	—	—
SK	3.14	3.62	**3.28**	+4	-10	+0



The climatic conditions of 2023/24 season in Europe were contrasted and led to disappointing results in many parts of Europe for most arable crops. In winter, large parts of northern Europe experienced a distinct cold spell at the beginning of the New Year. Distinctly warmer than usual conditions prevailed in south-eastern Europe. A pronounced precipitation surplus continued to affect many parts of north-western, central, and eastern Europe. Mediterranean regions were affected by a marked rain deficit, which in some regions developed into a situation of drought.

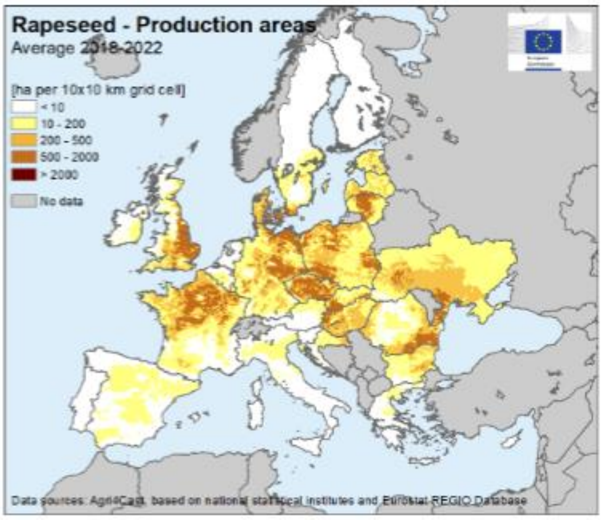
At spring, wet conditions in large areas in western Europe, as well as in Denmark, and northern Italy, resulted in water logging, high pest pressure and/or delays to sowing, with potentially negative effects on crop yields. Cold spell in April caused severe damage to fruits and vineyards, but damage to annual crops was limited. Water deficit affected crops in several parts of central, southern and eastern Europe

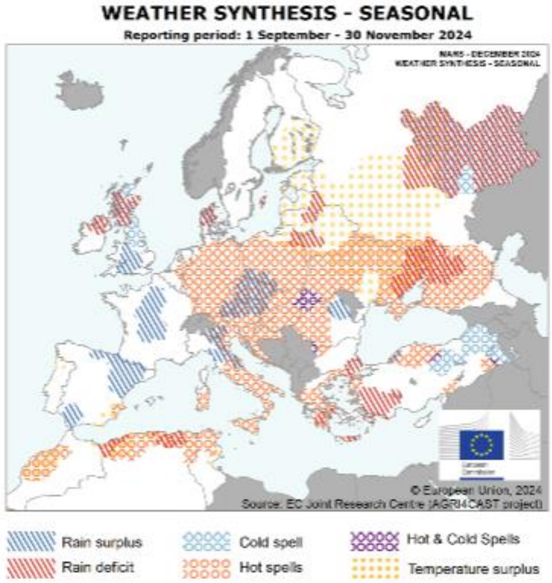


Then, overly wet conditions have also been observed in northern Europe (in continental Denmark, in limited parts of central Sweden and in the Baltic countries) where the harvest of winter crops was hampered; most notably in the Baltic countries, where an extremely intense rainfall event on 28 July, resulted in water logging, lodging and reduced grain quality, substantially decreasing the hitherto positive yield expectations.

The impacts on winter crops reported for other countries are associated with negative events that occurred (or started to occur) earlier in the season. Overly wet conditions negatively affected winter crops during most of the season in northern France, Ireland, the United Kingdom, the Benelux countries, western Germany and northern Italy. Dry spring and early summer conditions had a negative impact on winter crops in Romania, Türkiye, eastern Ukraine and southern Russia.

The 2024/25 rapeseed season has begun with rain, affecting the harvest of summer crops and sowings of winter crops. Nevertheless, rapeseed sowing were almost completed, most of them in August and before the arrival of lasting rainfall. (For more details, see MARS Bulletin October 2024 https://dx.doi.org/10.2760/752775 , November https://dx.doi.org/10.2760/587618 and December 2024 https://dx.doi.org/10.2760/12520)





At the end of November, rapeseed crops were generally in good condition despite adverse weather in some regions. In France, rapeseed stands were adversely affected by the persistently wet conditions up to mid-October. Despite the subsequent improvement of weather conditions, it is expected that some parcels with heavy clay soil will require re-sowing *(with other species). The French rapeseed acreage is estimated to 1.27Mha, down by 4,1 % compared to 2023/24, but still higher than the 5-years average). These evolutions are contrasted in French regions, depending on sowing conditions.*

In Germany and Poland, winter rapeseed was sown very early, benefiting from adequate conditions. In Germany, the stands are slightly more developed than usual, making them more susceptible to frost. In Poland, dry weather conditions have prevailed since mid-October, but soil moisture levels are still adequate. In southern areas affected by storm Boris in September, the conditions have returned to normal. The increased pest pressure in October had a limited impact, particularly given that the majority of rapeseed is grown in the north.

In most of central and south-eastern Europe, sowing was completed in early September. In north-western and south-eastern Bulgaria and southern Romania, crops were still small at the end of November due to a persistent rainfall deficit. In Czechia, early sown rapeseed established itself well, but later-sown crops are underdeveloped due to below-average temperatures. In Hungary, farmers continued to decrease the sown area significantly, after 4 years of adverse weather conditions and disappointing yields, while in Bulgaria the sown area is in line with the 5-year average.

In Italy and Spain, sowings were completed in October. However, the final area sown may be lower than expected due to the excessively wet soils observed in October. In Ireland, Denmark, Sweden, Finland and the Baltic countries, rapeseed sowing was already completed in due time in September, and crops are overall in good condition before the onset of winter. *(source: JRC MARS Bulletin, November 2024)*

Australia

According to Australian government publication ABARES, Dec 2024 (for detailed information, see https://www.agriculture.gov.au/abares/research-topics/agricultural-outlook/australian-crop-report/december-2024), the Canola production is forecast to fall by 8% to 5.6 million tonnes in 2024–25, driven by a decrease in total area planted and lower yields – a result of dry conditions in south-eastern Australia where a significant proportion of the national canola crop is grown. Area planted, however, remains above the 10-year average resulting in expected canola production remaining 23% above the 10-year average to 2023–24.

Ukraine

An extensive description of the situation of rapeseed crop in Ukraine has been made by Petro Vyshnivskyi (National university of life and environmental sciences of Ukraine) at the Canola Week 2024 in Saskatoon, covering both economic and agronomical aspects.

Despite the war, rapeseed production is on a positive trend in Ukraine from 3MT in 2021/22 to respectively 3.5, 4.75 in 2022/23 and 2023/24. Seeds exports reach 3.4 MT/year since2022/23.
Most rapeseed crops are winter rapeseed, with 1.219 Mha in 2024, and 37300 ha only for spring rapeseed.

See more production data on: https://ipad.fas.usda.gov/countrysummary/default.aspx?id=UP&crop=Rapeseed

Scientific news

Publications

To the authors: we identify publications through research with 2 key words only: "rapeseed" and "canola".

If a publication does not contain one of these two words, but for example only Brassica napus or terms implicitly linked to rapeseed/canola (names of diseases or insects or genes, etc.…), it will not be detected.

GENETICS & BREEDING

Xue, Y., Wang, S., Zhang, Q., Wu, F., Huang, L., Qin, S., ... & Chai, Y. (2024). *Brassica napus* **cytochrome P450 superfamily**: Origin from parental species and involvement in diseases resistance, abiotic stresses tolerance, and seed quality traits. Ecotoxicology and Environmental Safety, 283, 116792. https://doi.org/10.1016/j.ecoenv.2024.116792

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Wang, R., Wu, G., Zhang, J., Hu, W., Hua, S., Yao, X., ... & Zhu, Y. (2024). Integration of GWAS and transcriptome analysis to identify temperature-dependent genes involved **in germination** of rapeseed *(Brassica napus L.).* https://doi.org/10.21203/rs.3.rs-5174955/v1

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Wan, M., Zhao, D., Lin, S., Wang, P., Liang, B., Jin, Q., ... & Hong, D. (2025). Allelic Variation of BnaFTA2 and BnaFTC6 Is Associated With **Flowering Time and Seasonal Crop Type** in Rapeseed *(Brassica napus L.).* Plant, Cell & Environment, 48(1), 852-865. https://doi.org/10.1111/pce.15165

Min, Y., He, S., Wang, X., Hu, H., Wei, S., Ge, A., ... & Chen, M. (2024). Transcription factors BnaC09. FUL and BnaC06. WIP2 antagonistically regulate **flowering time under long-day** conditions in *Brassica napus.* Journal of Genetics and Genomics. https://doi.org/10.1016/j.jgg.2024.12.003

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Tan, C., Zhang, Q., Shen, W. et al. Expression profiles of microRNA-mRNA and their potential impact on **anthocyanin accumulation** in purple petals of *Brassica napus.* BMC Plant Biol 24, 1223 (2024). https://doi.org/10.1186/s12870-024-05922-8

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Upcoming international and national events

March 10–11, 2025, 2nd The Future of Oilseeds: Prospects for Plant-Based Proteins, Frankfurt, Germany.

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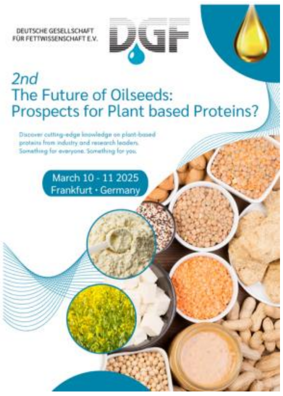

April 27-30, 2025, 2025 AOCS Annual Meeting & Expo, Oregon Convention Center, Portland, USA

https://www.aocs.org/event/2025-aocs-annual-meeting-expo/

October 12-15, 2025, 20th Euro Fed Lipid Congress and Expo, Leipzig, Germany

https://veranstaltungen.gdch.de/microsite/index.cfm?l=11649&modus=

April 18-21, 2027, 17th IRC International Rapeseed Congress, Paris, France

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.***

Contact GCIRC News:

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

Contact GCIRC: contact@gcirc.org