



Today, India is on its 37th day of lockdown to contain the spread of Covid-19. The Government is now planning a strategy to revive the businesses and economy. While it is not an easy task, for all the sectors are intertwined and needs an immaculate planning to kickstart all the businesses.

The Government has started the process of identifying reforms in various sectors and agriculture is one of the priority areas. Access to credit, technology adoption, marketing reforms, and other comprehensive set of reforms will soon be announced.

Meanwhile, other crucial steps implemented by the government to boost the agriculture sector is - state agencies are directed to buy more oil and pulses from farmers at government set minimum purchase prices. *Kisan Rath*, a farmer friendly mobile application has been launched to help farmers and traders search for transport for agriculture and horticulture produce. The State governments and Union Territories are directed to facilitate direct marketing, enable direct purchase from farmers/FPOs/Cooperatives by limiting regulation under state APMC Acts.

In an encouraging step, the Agriculture Ministry has advised farmers to adopt mechanised farming to ensure minimum involvement of manpower in its standard operating procedure (SOP) for farm operations ahead of kharif sowing to help farmers prevent the spread Covid-19 infection. For penetration of technology in agriculture, the government has also launched two modules under the National Agriculture Market (e-NAM) to decongest wholesale markets and to boost the supply chain. Under the FPO module, Farmer Producer Organisations can upload farm produce details from collection centres with picture/quality parameters and avail the bidding facility without physically going to the mandi. This module has now been adopted by Jharkhand. Under the Warehouse-based Trading Module, e-NAM has been integrated with e-Negotiable Warehouse Receipt (e-NWR), enabling farmers to sell their produce from WDRA-registered warehouses notified as deemed markets, without physically bringing the produce to the mandi. States like Andhra Pradesh and Telangana have implemented this module.

FSII along with its members are also at the forefront to maintain seed supply lines to the farmers during the lock down period. FSII has been constructively engaging with the Central

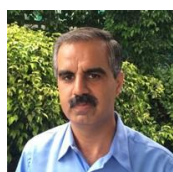
and State Governments in representing needs of the seed industry and in getting the necessary policy support for the processing, packing and transportation of seeds necessary for the Kharif season.

To fight COVID-19, FSII members have also generously donated over INR 9 cr towards PM Cares Fund, Chief Minister relief funds and towards other measures like PPE, Safety measures, Food distribution and Awareness programmes. Over INR 1.97 crore has been donated towards PM Cares Fund and INR 2.44 crore has been donated towards Chief Minister Relief Funds of Tamil Nadu, Andhra Pradesh, Telangana, Maharashtra and Karnataka.

This humanitarian aid is for scaling up healthcare support, sanitisation at containment zones, feeding communities and treatment of the disease. The members are offering their facilities like hospitals, colleges for treating COVID-19 patients, they are also providing PPE kits, sanitisers, gloves, face masks, sanitising cities, feeding people, providing health care support and running awareness campaigns across the country. Voluntary contributions are also made by employees of FSII member companies which are being donated to the relief funds. Further, the member companies are also supporting their own employees at their factories with full healthy and safe work environment.

FSII along with its members are ensuring that amidst the lockdown our farmers are well equipped with quality seeds and are ready for Kharif sowing. We are working along side the government and are committed for the benefit of farmers and maintaining food security in these testing times.

In this newsletter we have covered several important developments on agriculture across India, globally and in the area of research. We hope you find it a good read!



Shivendra Bajaj
Executive Director
Federation of Seed Industry of India

COVID-19

[FSII members pledge over Rs 9 cr towards COVID-19 relief measures](#)

(Business Standard)

The Federation of Seed Industry of India (FSII) on Thursday said its members have pledged over Rs 9 crore towards relief measures to combat the COVID-19 crisis. FSII, a 40-member association of R&D-based plant science industry, said the donations have been made towards the PM-CARES Fund, Chief Minister's relief funds in different states and for supply of medical and safety gears like PPE, besides food distribution and awareness programmes.

[Farmers may not be infected but are certainly affected](#)

(Mint)

The panic from the outbreak is so intense that the supply chains of even the agriculture sector that provides food - the most fundamental need of every human being - have been curbed. The lockdown imposed in several countries is essential to maintain social distancing and help flatten the curve. While imposing these policies, overlooking the agriculture sector could turn out to be the biggest blunder. The prices in the Indian maize market are likely to further plummet. Reports of Bird Flu in some locations and the wrongly-held belief that eating non-vegetarian food can cause coronavirus further reduced the demand for maize for feed.

[Prioritise manufacturing, agriculture and restart in phases, Assocham's plan for post-lockdown India](#)

(The Financial Express)

Suggesting a calibrated approach for various industries and sectors, to re-start their operations, industry body Assocham has formulated an approach strategy along with a standard operating procedure for resuming economic activity in India. It has been suggested that economic activity should resume in phases, prioritising sectors like agriculture, export units, highly-automated industries and selective construction over others. Assocham has rooted for medical fitness and testing of employees to be prioritised before work resumes in any phase and continuing the same on a periodic basis until the pandemic is completely wiped out.

[Agriculture minister joins G-20 meet over Covid-19 impact on food safety](#)

(Business Standard)

Union Agriculture Minister Narendra Singh Tomar participated in a virtual meeting of G-20 Agriculture Ministers to address the issue of Covid-19 impacts on food security, safety and nutrition. Sharing the measures taken to contain the spread of Coronavirus in India, Tomar informed his counterparts that India has decided to exempt all agriculture operations during lockdown period and ensuring continued availability of essential agriculture produce and supply, while adhering to protocol of social distancing, health and hygiene.

[How to maximise food security in post-COVID India](#)

(Money Control)

The Indian agriculture and food processing sector have so far ensured that staple foods such as wheat flour, rice, pulses, edible oils, and fruits and vegetables are largely available across India. In most parts of India, urban centres have also not experienced any serious shortage of food items. However, despite abundant production and availability of fruits and vegetables, there has been a price rise due to restrictions on mandi operations and movement from villages. At several places, there are reports of distress sale of vegetables and fruits by farmers. Despite the Union government's clear instructions, police have been restricting movement, due to which farmers are selling in distress and consumers are paying 15-20 percent higher prices. According to the Solvent Extractors Association, India consumes about 23 million tonnes of edible oils, out of which only about 8 million tonnes is produced domestically, and the remaining 15 million tonnes is imported. An efficient global supply chain has ensured that Indian consumers have so far not faced any shortage, nor any price rise.

[After COVID-19, India's next challenge could be mega-sized locust attack this summer](#)

(The Hindu)

Amid the COVID-19 pandemic, India's response to natural disasters is expected to be tested again this summer when a giant locust storm from the Horn of Africa is expected to attack farmlands in South Asia. Official sources said that the government was preparing for a "two-front war" — one, which was ongoing against the COVID-19 infections and another to ensure food security — in anticipation of the locust attack on farms.

[Indian begins export of major farm items amid COVID-19 lockdown: Government](#)

(The Economic Times)

India has started export of major farm products such as rice, meat, dairy and processed food items after the government stepped in to resolve the issues related to transportation and packaging in the wake of COVID-19 lockdown. The Union Agriculture Ministry, in a statement, said exporters' problems are being resolved by the farm export promotion body Agricultural and Processed Food Products Export Development Authority (APEDA). So far, the government has issued 9,759 phytosanitary certificates for exports. On specific demand from countries, agri-cooperative NAFED has exported 50,000 tonnes of wheat to Afghanistan, while 40,000 tonne of the grain to Lebanon under G2G arrangement.

[S.Africa to reopen agriculture sector, allow more manufacturing, retail](#)

(Reuters)

South Africa plans to reopen its agriculture sector and allow some manufacturing and retail to resume as the country balances the need to restart economic output and curb the spread of the new coronavirus, trade minister Ebrahim Patel said on Saturday. South Africa has spent a month under

restrictions requiring most of the population to stay at home apart from essential trips, leaving many businesses and individuals struggling without income in the recession-hit economy.

[Don't panic: Australia has truly excellent food security](#)

(The Conversation)

COVID-19 has taken Australia and the world by surprise. Coming after severe droughts in eastern Australia, concerns have been raised about Australian food security. The concerns are understandable, but they are misplaced. Despite temporary shortages of some food items in supermarkets caused by an unexpected surge in demand, Australia does not have a food security problem. An Australian Bureau of Agricultural and Resource Economics and Sciences study released today outlines why Australia is one of the most food-secure countries in the world.

[Government backs agriculture labour force](#)

(Fruitnet.com)

The Australian government has announced temporary changes to visa arrangements, following sustained calls from peak industry bodies to ensure the industry has a reliable workforce in place for the upcoming harvest. The temporary changes relate to those currently in Australia and working within the Pacific Labour Scheme, seasonal worker programme, and working holiday makers and will allow them to extend their stay for up to 12 months to continue to work in the agriculture and food industry.

[Farming supply chain under pressure but coping](#)

(Farm Weekly)

Government and agricultural industry bodies are confident the cropping supply chain will continue to flow, despite the COVID-19 pandemic. While good early rain across key areas of the cropping belt are driving demand, supply slowdowns due to COVID-19 could have the potential to derail crop planting if not managed correctly. Minister McCormack said exemptions had already been put in place, ensuring roadhouses, dedicated truck stop facilities and truck driver lounges remained open to service truck drivers.

[PM Hasina announces Tk 5000 Cr subsidised loan package for agriculture in Bangladesh](#)

(AIR)

Prime Minister Sheikh Hasina announced a Tk 5000 crore special subsidized loan package for boosting agricultural production in the country in the aftermath of the Corona crisis hitting the world. In a video conference with officials, Prime Minister Sheikh Hasina said that the refinancing scheme of Tk 5000 crore will carry a maximum interest rate of 5 per cent. She said that the small and medium farmers will get the loan from this fund to use as current capital for use in agriculture and related activities like fishery, poultry farming etc.

[Farmers hold key to feeding Asia amid COVID-19 restrictions](#)

(Channel News Asia)

From Pakistan and Malaysia to Australia and New Zealand, an unprecedented freeze on movement of people, goods and services is underway – and understandably so. COVID-19 has an ever-increasing grip on the Asia-Pacific, and regional governments are reacting in the best way they know to stop the spread of the diabolical pandemic. In nearby Malaysia, Vietnam, the Philippines and Thailand, strict quarantine measures, border closures and nationwide shutdowns for non-essential businesses are in place.

['A disastrous situation': mountains of food wasted as coronavirus scrambles supply chain](#)

(The Guardian)

Billions of dollars' worth of food is going to waste as growers and producers from California to Florida are facing a massive surplus of highly perishable items. As US food banks handle record demand and grocery stores struggle to keep shelves stocked, farmers are dumping fresh milk and plowing vegetables back into the dirt as the shutdown of the food service industry has scrambled the supply chain. Roughly half the food grown in the US was previously destined for restaurants, schools, stadiums, theme parks and cruise ships. The impact could be up to \$1.32bn from March to May in farm losses alone, according to a National Sustainable Agriculture Coalition report.

[Welcome to The New World of Digital Agriculture](#)

(Forbes)

An ecosystem scientist and an agricultural economist have outlined how agriculture needs to develop a more sustainable land management system through the integration of big data into crop and farmland usage, which they are calling digital agriculture. In a paper released in Nature Sustainability in April 2020, Michigan State University professor Bruno Basso, a professor in the College of Natural Science at Michigan State University, and John Antle, professor of Applied Economics at Oregon State University, posit that digital agriculture can pave the road to agricultural sustainability.

[Spain to hire foreign workers to cover agriculture shortfall](#)

(Infomigrants)

The Spanish government said it will authorize the temporary hiring of tens of thousands of immigrants or jobless people to address the present lack of labor in agriculture. In a bid to unblock bottlenecks in the production chain and prevent the prospect food shortages, the government said it would allow farms to take on between 75,000-80,000 people. The new measures will be in force until June 30, 2020, the government said. Many of the additional workers would normally be barred from working as they receive state benefits.

[Agriculture after the pandemic](#)

(CGTN)

As the COVID-19 pandemic forces countries to close their borders, their agricultural sectors are confronting major challenges. The risks inherent in depending on foreign seasonal workers have materialized in several European countries, including France, Germany, Italy, and the Netherlands, which depend on labor from Eastern Europe. Between border closures and fears of sickness and quarantine, those workers are not coming this season, and many Western European crops are set to rot in the fields.

[COVID-19 pushes Canadian food industry to tipping point: Federation of Agriculture](#)

(Coast Mountain News)

The COVID-19 coronavirus has pushed the Canadian food industry to a tipping point, according to the Canadian Federation of Agriculture (CFA). In a time of economic crisis and global uncertainty, the CFA called upon the Canadian Government to prioritize food production, second only to health, to ensure farmers can continue to feed 36 million Canadians every day.

News from India & Around the World

[Recognise superfoods to shift dietary needs towards sustainable crops](#)

(Bio Voice)

Sustainable food production with a low carbon footprint is being demanded not only by researchers and environmentalists but also by consumers across the globe. This awareness could benefit us by enabling the changes required in the way we grow, process and consume food. This is also in line with the Sustainable Development Goal No.12 'Responsible consumption and production' which the Governments are expected to deliver by 2030. The food space is rapidly changing, and it presents an opportunity for the food industry and researchers to cater to the demand of consumers fitting their changing lifestyles and expectations.

[Normal monsoon forecast is just what battered Indian economy needs](#)

(The Print)

The India Meteorological Department (IMD) has predicted a normal monsoon this year, spelling some cheer for the country's agriculture sector amid the Covid-19 lockdown. According to the first IMD forecast — to be updated next month — the southwest monsoon this year will be 100 per cent of the long period average (LPA). LPA represents the average annual rainfall received by India during the southwest monsoon over the five decades from 1961 to 2010. Estimated at 88 cm, this figure serves as the standard against which the performance of the southwest monsoon is judged every year. The monsoon forecast is critical to India's food production and GDP growth — deficient rains could adversely impact farmer incomes and thereby drag down rural demand and consumption. This could hurt overall economic growth, especially at a time when agriculture is expected to be the only bright spot for India in 2020-21.

[Agriculture innovation to achieve food security & tackle malnutrition in India](#)

(The Week)

India needs to create more synergies in food technology, agriculture, biotechnology. Prioritizing and adaption of innovation should act as main drivers of productivity growth and improved sustainability. We should not forget to leverage available resources in the right manner. Amidst the current tensions, good seeds and other farm inputs must reach farmers in time for kharif season. Automated machines should be introduced for the planting of seeds which need only a machine driver for sowing and harvesting. Indigenous manufacturing of automated machines should be promoted by the government to cut down the overall cost. Subsidies should be provided to the manufacturers of such machines so that farmers can buy them at economical prices. Fostering Genetically Modified Organisms (GMOs), using genetic engineering is another way of contributing to food and nutrition benefits while boosting agricultural production besides reducing a post-harvest loss.

"One Activity Giving Hope Is Agricultural": Centre On Winter Crop Harvest

(NDTV)

The government said 67% of wheat crop sown in winter (rabi crop) has been harvested despite the lockdown amid the COVID-19 pandemic. It said there is "minimal or no disruption" in harvesting rabi crop and sowing of summer crop during the lockdown. Summer crop sowing is 14% higher over corresponding period last year as on April 17. Amidst the uncertainty prevailing today, the one activity giving hope is agricultural activity, which is also providing the reassurance of food security. All throughout India numerous farmers and agriculture labour are sweating and toiling against all adversities. Their silent efforts, coupled with timely intervention by the central and state Governments, have ensured that there is minimal or no disruption to harvesting activities and the continued sowing of summer crops.

With 3% growth this year, India's agriculture output will be a lone bright spot for economy

(The Print)

India's agriculture output is seen growing faster than expected in the current financial year, emerging as the lone bright spot at a time when the coronavirus pandemic is taking out the economy's growth engines one after another. Farm sector growth will top 3% in the year started April 1, Ramesh Chand, an adviser to Prime Minister Narendra Modi, said. The sector is expected to have expanded 2.8% last year and 2.9% the year before. Agriculture growth rate this year will be intact, in fact, agriculture will be a big support to an otherwise sagging economy. Asia's third-largest economy is seen headed for a rare annual contraction, as a more than month-long lockdown to prevent the virus's spread effectively puts a lid on consumption — which makes up about 60% of India's gross domestic product.

Can agriculture exports lead to farm income growth?

(Market Express)

One of the key reasons why agricultural export failed to translate growth in farm income is its inability to diversify its agricultural export market from primary agri commodities to high valued processed food. ~20% of our agri export is rice while the high valued commodities, like fruits, or processed fruits accounts for a mere 3-4% of total agri export. Poor storage capacities, highly competitive fruits markets, phytosanitary requirements, etc., have limited the export of fruits or any other high valued commodities. For similar reasons, diversification of the Agri export market is also limited to only developing countries or so-called "Global South" which are by themselves subject to various economic risks. For instance, in 1990, India's major agricultural export partners were the Soviet Union, United States, United Kingdom, Saudi Arabia and Japan. In 2018, India's major agri-export destinations were Vietnam, United States, UAE, Bangladesh, Iran, Saudi Arabia, China, Indonesia and Malaysia.

India to export 90,000 tonnes of surplus wheat to Afghanistan, Lebanon

(Business Standard)

India had a good crop of wheat, in surplus of its own demand. On specific demand from countries, cooperative NAFED has been asked to export 50,000 tonne wheat to Afghanistan and 40,000 tonne to Lebanon under G2G arrangement said the Union Agriculture Ministry. Since India has produced more wheat than it consumes, it has been decided to export the grain to Afghanistan and Lebanon after receiving requests from the two countries, Mr Narendra Singh Tomar said in a Tweet. Right now, harvesting of wheat -- the main winter crop -- is underway in India. Farmers have harvested wheat crop in about 33 per cent of the total sown area so far and it will pick up in the coming weeks. According to the second government estimate, the country is set to harvest a record wheat production of 106.21 million tonne in the 2019-20 crop year on the back of good rains.

[Indian agriculture on modernisation track since 2014](#)

(Future Farming)

With Indian agriculture and allied sectors on the verge of adopting new technologies such as IoT and agri drones, foreign companies can play a very important role in supplying these new technologies to farmers. Though there are many India companies active, close to 267 million farmers need to be catered for. This enables private and foreign entities to expand their footprint in this part of the globe. However, their technologies also need to be affordable. To cater for them, government, industry, and research institutions have to form a consortium, so that agritech start-ups can flourish and meet the demands of Indian farmers.

[Australia to track citrus fruit exports using blockchain](#)

(Ledger Insights)

Citrus Australia, the non-profit representing citrus growers in the country, is piloting a blockchain-based traceability system for horticulture supply chains. The organization will be working with authentication services provider Laava ID and blockchain firm Trust Provenance to develop the food traceability system for Australian citrus fruit exports. Government agency Agriculture Victoria has engaged Citrus Australia to initiate this \$200,000 pilot program. For the pilot, Citrus Australia is partnering with citrus packer and exporter Mildura Fruit Company, and Nu Leaf IP, the master licensee in Australia for Tang-gold (seedless mandarin variety).

[China is going organic and emerging as a leader in sustainable agriculture](#)

(The Print)

But sustainable agriculture practices and organic food production are on the upswing in China. The total area of certified organic agriculture cultivation increased more than five-fold between 2005 and 2018, to 3.1 million hectares, according to a 2019 government report. China ranked third in certified organic area in 2017, after Australia and Argentina. Total organic sales in China ranked fourth globally, after the United States, Germany and France. Uncertified organic production is also widespread.

[Why agriculture is future of youth employment](#)

(Forbes)

A lot of food producers in Africa are ageing, which means the youth have to come on board and play a big role in producing food. There is immense potential in the sector, from farming and providing innovative solutions to farmers through technology to value addition. The Food and Agriculture Organization of the United Nations estimates that there are 1.2 billion youth in the world, a massive 88 per cent are in developing countries and 75 million are unemployed. In Kenya, a good chunk of the youthful population in the labour market is learned, having graduated from tertiary colleges and other institutions of higher learning. However, there are few formal jobs, so a majority are jobless. The agriculture sector presents a large reservoir of untapped agribusiness frontiers and decent job opportunities for the young.

New Research

[GWC1 is essential for high grain quality in rice](#)

(Science Direct)

Appearance quality is an important determinant of rice quality. Many genes that affect grain appearance quality have been identified, but the regulatory mechanisms that contribute to this trait remain unclear. Here, two grains with chalkiness (gwc1) mutants, gwc1-1 and gwc1-2, were identified from an EMS-mutagenized population of indica rice cultivar Shuhui498 (R498). The gwc1 mutants had poor grain appearance quality consistent with the measured values for the percentage of grains with chalkiness, square of chalky endosperm, the total starch, amylose and sucrose contents. Milling quality and grain size were also affected in the gwc1 mutants. The gwc1-1 and gwc1-2 were found to be loss-of-function allelic mutants. Overall, the present findings reveal that GWC1 is important for grain quality and yield due to its effects on grain chalkiness and size.

[Local food crop production can fulfil demand for less than one-third of the population](#)

(Nature)

The distance between the origin and end-point of food supply chains, and the 'localness' of food systems, are key considerations of many narratives associated with sustainability. Using an

optimization model based on 'foodsheds' (that is, self-sufficient areas with internal dependencies), we calculate the potential minimum distance between food production and consumption for six crop types around the world. We show that only 11–28% of the global population can fulfil their demand for specific crops within a 100-km radius, with substantial variation between different regions and crops. For 26–64% of the population, that distance is greater than 1,000 km. Even if transnational foodsheds were in place, large parts of the globe would still depend on trade to feed themselves. Although yield gap closure and food loss reductions could favour more local food systems, particularly in Africa and Asia, global supply chains would still be needed to ensure an adequate and stable food supply.

[Close relationship between the state of the oxygen evolving complex and rice cold stress tolerance](#) (Science Direct)

The results of the present work suggested a relationship between the growth stability and functional/structural parameters associated to the primary photochemistry and oxygen evolving complex (OEC) in tolerant rice plants under suboptimal low temperatures (SLT) stress. This was concluded from the absence of changes in net photosynthetic rate and in fraction of reaction centers to reduce quinone A, and very small changes in P680 efficiency to trap and donate electrons to quinone A and in fraction of active OEC in tolerant plants under cold stress but not in sensitive plants.

[Conservation agriculture for sustainable intensification in South Asia](#) (Nature)

A meta-analysis using 9,686 paired site–year comparisons representing different indicators of cropping-system performance suggest significant ($P < 0.05$) benefits when conservation-agriculture component practices are implemented either separately or in tandem. For example, zero tillage with residue retention had a mean yield advantage of 5.8%, a water use efficiency increase of 12.6%, an increase in net economic return of 25.9% and a reduction of 12–33% in global warming potential, with more-favourable responses on loamy soils and in maize–wheat systems. Results suggest that there are opportunities to maximize expected benefits, and policymakers and development practitioners should continue to be appraised of the potential of CA for contributing to the Sustainable Development Goals in South Asia.

[New tool to combat major wheat disease](#) (Science Daily)

Agricultural Research Service (ARS) scientists and their colleagues have discovered a gene that can be used to develop varieties of wheat that will be more resistant to Fusarium Head Blight (FHB), a disease that is a major threat both overseas and to the nation's \$10 billion annual wheat crop. A paper reporting the discovery and the cloning of the gene, known as Fhb7, was published in the journal Science. The study was led by scientists at the Shandong Agricultural University in Shandong, China and co-authors include ARS researchers Guihua Bai and Lanfei Zhao in Manhattan, Kansas, and Steven Xu in Fargo, North Dakota.

[Plant stress biology in epigenomic era](#) (Science Direct)

Recent progress in "omics" methodologies allow us to gain insight into the complex molecular regulatory networks underlying plant responses to environmental stresses. Among the different genome-wide analysis, epigenomics is the most under-investigated "omic" approach requiring more critical and speculative discussion about approaches, methods and experimental designs. Epigenomics allows us to gain insight into the molecular adaptation of plants in response to environmental stresses. The identification of epigenetic marks transmitted during filial generations enables new theories to be developed on the evolution of living organisms in relation to environmental changes.

[Fungus application thwarts major soybean pest](#) (Science Daily)

The soybean cyst nematode sucks the nutrients out of soybean roots, causing more than \$1 billion in soybean yield losses in the U.S. each year. A new study finds that one type of fungi can cut the nematodes' reproductive success by more than half. The researchers report their findings in the journal Plant Disease. Previous studies have found that fungi in the soil that form mutually beneficial relationships with soybeans and other plants can influence the success of plant parasitic nematodes, including SCN. But the effectiveness of using these "arbuscular mycorrhizal fungi" to thwart plant

parasitic fungi varies from study to study, making growers reluctant to embrace this as a method of control.

[Evaluation of the propensity of interspecific hybridization between oilseed rape \(*Brassica napus* L.\) to wild-growing black mustard \(*Brassica nigra* L.\) displaying mixoploidy](#)

(Science Direct)

Potential gene flow from transgenic *Brassica napus* to widely distributed, cross-compatible weedy relatives has received significant attention. All previous, albeit scarce, research has shown little to no success in producing viable F1 hybrids between *B. napus* (n = 38) and *B. nigra* (n = 16). The present study tested the working premise that the propensity for interspecific hybridization is significantly higher between *B. napus* and wild-growing, *B. nigra* displaying mixoploidy (n = 32).
