- Overall, how valuable has research been in the following areas:
- Dans l'ensemble, quelle est la valeur de la recherche dans les domaines suivants :

Answer Choices/Responses

Environmental impacts of organic / Les impacts environnementaux de l'agriculture biologique

Social impact of organic / Impact social du bio

Food nutritional value and health risk reduction related to organic / Valeur nutritionnelle des aliments bio et réduction des risques pour la santé par le bio

Improving knowledge about soil, crops, and pest to support production systems / Améliorer les connaissances sur les sols, les cultures et les organismes nuisibles pour soutenir les systèmes de production Developing technologies and inputs specific for organic / Développer des technologies et des intrants spécifiques pour le bio

Informing organic sector standards development / Informer l'élaboration des normes biologiques

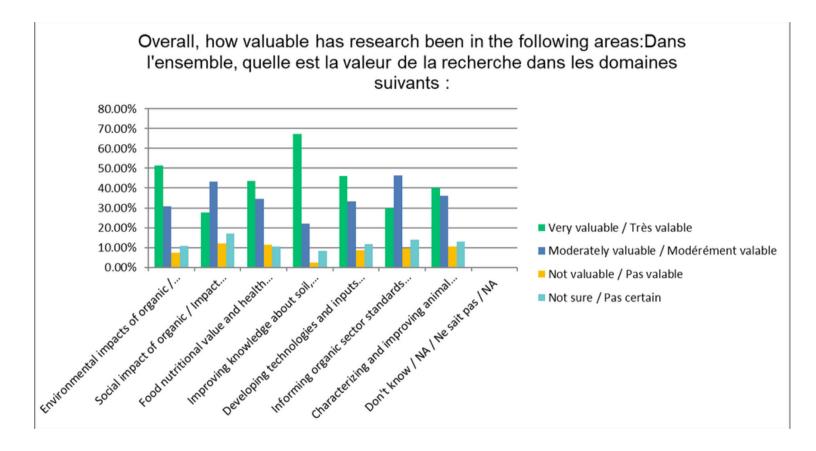
Characterizing and improving animal welfare in organic systems / Caractérisation et amélioration du bienêtre des animaux dans les systèmes biologiques

Don't know / NA / Ne sait pas / NA













- How has research and innovation in organic been helpful to you specifically?
- Comment la recherche et l'innovation dans le domaine du bio vous ont-elles été particulièrement utiles?

#### **Comments / Commentaires**

Note: The comments below were submitted to the survey by individuals, and do not reflect the views of the Organic Federation of Canada, Canadian Organic Trade Association, the Organic Agriculture Centre of Canada, or the Canadian Organic Growers.

Remarque: Les commentaires publiés ci-dessous ont été soumis par les participants au sondage et ne reflètent nécessairement pas le point de vue de la Fédération biologique du Canada, de l'Association canadienne du commerce biologique ou, le Centre d'agricultures biologique du Canada de Cultivons Biologique Canada.

- Short info briefs and papers relaying research findings (eg. on specific pest management practices or soil management practices), especially from organic extension agents in the united states.
- Systèmes de culture plus performants (productivité et qualité) et plus durables.
- added knowledge
- Technologie de désherbage avancée
- Developpement d'un nouveau business semences
- Communication with customers
- Cover crop, nutrient management research from UBC has been very useful, in improving our nutrient management. Looking forward to seeing the finished research on the use of silage tarps and covercrops
- It hasn't been. I grew up farming when organic farming was just considered farming period. Very little to no chemical was used at all, very old farming practices were used, and knowledge was learned. Now that I'm farming again on my own, I use no chemicals of any kind, I still use the old farming practices and old style equipment and I learn from what I do and from the past. I read up on new non-GMO grain varieties and even test them if I can to see if they work for my land
- peu utile encore
- Depuis le temps que l'on est bio, nous avons fait nos propres essai erreur
- Amélioration des pratiques culturales
- Controlling pests and diseases in vegetables. Development of disease resistant varieties.
- Research on weed control strategies, specifically inter-row cultivation







- "I strongly support organic food production and welcomed the opportunity
- to become actively involved."
- As a retailer, research provides the basis for informed consumer education. Understanding the
  environmental or nutritional benefits of organic helps us educate shoppers in return and grow
  awareness.
- it has not been helpful
- Gives us tools to help work with and educate our farmer network on new techniques that they may find helpful in their production.
- Aide à l'acquisition de connaissances pour offrir un bon soutien à ma clientèle de producteurs agricoles.
- Pour l'instant, j'ai l'impression que la recherche s'est concentrée sur les défis techniques du bio, plus que sur les bienfaits environementaux ou l'amélioration génétique.
- I'd like to see that the science (and research and innovation) is informing the organic standards review to a much larger degree than it has.
- It hasn't been. I farm traditionally which is healthier then certified organic producers
- Enabled me to farm in a very marginal area.
- Increase my knowledge and commitment to ecosystem and human health
- Learning about integration of livestock with grain and information on soil science have greatly impacted our practices on our farm.
- The work that the Rodale Institute has done has been valuable.
- NA
- améliorer la productivité et l'intérêt des producteurs vers ce mode de production
- I obtained the Certificate of Specialization in Organic Agriculture. That would not have been possible without the systems and research available.
- Mechanical weeding equipment innovation has been labour saving and makes organic farming possible to be achievable and profitable
- Je ne suis pas certain
- mm
- So far it hasn't all input miracle products have proven to not work. I learn on my own and trade
  information with other producers.
- N/A
- changed the way I address soil fertility and crop production
- Learning different practices for production and management. Re-diversifying landscape. My health :)







- better base to promote advantage of organic
- Can't say it has been.
- It helps me better understand the value of organic and sustainable products protecting the soil, water, air, biodiversity, and the health of all living organisms that share this planet. Providing facts from research allows me to get more attention from farmers, traders, and end consumers.
- Not much available for beekeepers
- Soil management information on how to increase soil health. More needs to be done in this area through private individuals and their experiences.
- Très utile pour comprendre la base du bio
- It has made me more aware of trends and potential options
- Cover crops and seed breeding for organic production
- It has been helpful to read about soil microbiology and how it relates to plant heath and in turn nutrient dense food.
- informs and supports producers resulting in their certification.
- Practices
- My knowledge of soil biology, plant/weed growth habits/interaction and crop production in general has grown exponentially since starting to study organic cropping systems.
- Increased my general knowledge about organic production and relevant inputs.
- database of organic inputs was super helpful; ACORN has been an incredible resource for coordinating events, sharing knowledge, and keeping farmers up to date in NL -- we are underserved by our provincial farmer supports
- Inputs used, pest control. Workload improvement.
- not helpful; organic apple producer
- Build better systems on our farm for more effective and environmental practices. We get better every year.
- organic practices / weed control / crop rotation / soil health learning have been most helpful in making our farm successful.
- the sector is growing and interest remains strong to become certified
- The national standard has become recognized due to research so that the standards actually have meaning







- The more I know and understand, the more useful it is for me personally. I have always been interested in organic agriculture and health, and the two are intimately connected. The general health of people has deteriorated since the advent of agribusiness and the so-called Green Revolution which is proving a disaster for public health and health of ecosystems everywhere where is it practiced, including influence on climatic changes.
- The question is too vague to answer
- The growth of the organic sector has allowed me to stay on the farm, stay out of debt, receive a decent farm income, avoid high cost input expenses, and avoid corporate capture of my farm business.
- It inspires new approaches in lots of areas.
- Intercropping for specific regions
- It has not really delivered much yet in terms of providing new tools. It's good for backing up organic claims.
- SIR has changed my life.
- New products and technologies I've heard about help develop new solutions to complex problems
- It hasn't. There is so much unproven products in the industry that I trust none of them and do not see any organic organizations providing any independent research on these products. I appears that organics is more interested in fighting against GMO's and glyphospate rather than providing help on inputs that would grow better crops.
- Have yet to see anything
- We have been part of a research project to quantify the effects of organic sanitation on sprouting seeds. Plenty of other organic research has helped our farm production over the years.
- It would be more helpful if the research were more effectively communicated—to growers, consumers, and other stakeholders. I answered the above #35 as if all were a call for more research—and communications—in those areas of focus. I would say none of the above are yet clearly effective or 'valuable' in terms of the messaging and communications.
- It has had a large impact on developing the organic sector in our province
- Learning about the benefits and interactions with the soil ecosystem has been helpful.
- Pest and disease control products
- Helped support our production system logic with relevant research and provided understanding to base movement up the production chain.
- We are continuously improving our practices and find research on regenerative organic practices adn benefits highly valuable.







- The articles on sustainability and improving soil health have been very helpful.
- greenhouse soil research.
- it has provided information on crop rotations and cropping options through the research centres.
- It has help to re-establish the facts that we can only co-exist with nature and cannot over power or exploit it endlessly.
- j'ai fait mes études dans le secteur : découverte des nouvelles technologies
- vision à long terme du secteur avec ses possibilités
- Perenial species historically native as useful for sustainable production.
- I'm not sure it has been of much value to me directly as a vegetable grower. There are a few products we use consistently and quite a few products we've tried but have not found to be reliably effective. Most of the research I've heard about was either done in the USA or is coming from companies that have a product to sell which makes the info less reliable.
- We purchased a Combcut for mechanical weed control it was developed in Sweden it is extremely valuable for weed control.
- We are learning about inter-cropping/cover cropping and how in-field biodiversity improves soil health, fertility, tilth and crop health
- We attend educational events put on by provincial organic associations and learn about and assess new ideas and approaches from the presenters and from fellow attendees
- We have been able to adapt some of our management techniques, and improve overall outcomes
- The research thus far is filled with possibilities for mitigating climate change (SOC), reducing water
  use/pollution, enhancing soil health/increased knowledge regarding soil biology, smallholder farms
  supportive of rural culture, animal husbandry. However, there is still way more research and policy
  supporting conventional agriculture it often overwhelms research on organics. In a sense, organic
  research and innovation is just beginning to affect the culture of industrial thinking but it still has a long
  ways to become more mainstream.
- I'm sure research has been done but unless I put the work in to look things up, this information has not found its way to me.
- I'm not seeing much from the non profit organizations versus my peers
- saved me from finding out the hard way which is by myself. Access to information is huge in terms of time and cash savings. Research and innovation confirms existing theories or opens us up to new methods, technology and information
- I transfer the latest science to producers so the science is critical to my work







- It's about being fair, being kind, and being the best steward we can be for our time here in this place. The consequences of our actions stretch beyond our time here in this place; much like our children will outlive us, but we still try hard to raise decent human beings. Organic innovation and research guides me towards understanding the right choices for our plants and livestock, and also our micro-environment here on the farm, looking at system co-operation and sustainability.
- Our organization is science-based and uses research to set organizational positions and make policy recommendations. Our public comment feedback on the standard referenced research whenever possible.
- Plus nous développons des méthodes pour le bio, plus ce type d'agriculture deviendra efficient et abordable
- provided information about transisitioning
- We have had a research program on out farm for 20 years
- Thet helped me understand how fertilization, cycle of pests and deseases work in organic production and how to better advise the growers to acheive better yield, cut down cost and get better quality of products.
- A lot of new hand tools have been developed to improve efficiency, soil health research has improved my ability to manage crops.
- I see the value in the products or categories that I've worked on and as a consumer I certainly benefit as I note that more locally grown/produced certified organic products are available.
- It has been helpful more with our ingredient suppliers rather than our business directly.
- overloaded with information. Which is the most credible?
- It's embedded. I cannot even fathom the details. Extensive.
- Helps make more informed decisions
- Yes, provides more public resources to be shared with operators, to help them understand how to implement the COS on their operation.
- Little here but other countries have provided a lot. Expensive to do here but with the pandemic, it has made it quite challenging at a minimum.
- I appreciate the wealth of knowledge and information that I can access both online and through my local organic community. The widespread sharing of organic tools, products, and farming methods has helped me develop my own business and growing practices.
- It didn't change what we knew or needed to know
- it always makes me want to do better







- The development of our enzyme to speed the OF production process.
- A permis le démarrage de nombreuses entreprises et l'augmentation de surface bio
- To better understand the importance of soil life
- New to farming, it helped me build an initial plan, what to do/use and when. The basic starting points were out there, but it was hard to find and piece together.
- I have no idea how much research and innovation has impacted these views...however, over 25 years the public seem to be more aware of Certified Organic foods and increased benefits. They may not agree, may not be fully aware of all benefits, but have at least some awareness of the organic industry. More products are available in your large scale food stores. More people are shopping at smaller Health Food stores and seeking better foods and products for their health.
- To support policy development and identify best practices
- Elle ne nous est pas utile, il y a un énorme décalage entre les chercheurs de bureau et les problèmes sur le terrain
- in apple production
- Ils permettent de mieux maitriser des systèmes de production efficace
- Variety development specific to organic. Study of organically acceptable weed and pest control. Crop rotation recommendations for soil and weather consideration.
- iCertify has made record keeping more efficient. Digitalizing renewals has made the process easier. Digital farm management apps have made audits easier and can show insights into the benefits of different management practices.
- I'm not sure it has been helpful at all. We already knew many of the standards were how you should grow your products. "Research and innovation" usually means more rules and restrictions.
- Promotion et Développement de nouveaux produits
- The recent breakthroughs in understanding the soil food web and the inputs and practices that support them are key to true regenerative farming and the future of successful organic growing.
- As we learn more about the human biome and how it relates to the microbiology our food grows in we
  will better address the health of people and perhaps turn around the continued growth of autoimmune
  disease that currently afflicts too much of the world.
- not sure
- Now most folks know about organic, alas many still can't afford it.
- has not been helpful to me. availability of competitively priced nutrient inputs is an obstacle.
- Have developed no-till strategies for spring and fall cereals







- Most of the times we have to find our own answers
- Ne sais pas
- It has given mw a greater knowledge of soil biology, pest management and animal nutrition
- Research results are the bases for me to provide advice/consulting to organic producers, in particular the agronomic research
- Source d'amélioration des pratiques et d'accès à des informations qu'il est possible de relayer aux consommateurs.
- Research on rotations and soil building has been helpful.
- connaître la fertilisation et les ravageurs
- How to build Soil health and soil biology
- intercropping practices- how to and what
- Development of bio controls- cereal leaf beetle, bind weed mite
- Je ne suis pas concernée, mais en tant que consommateurs, j'ai à cœur de savoir le plus possible ce que je manges et utilise chez moi. Les certification sérieuse d'engament et de qualité sont importante pour ma part.
- I try my best to only feed my family organic food and take pride in growing organic food for our customers. Any research that helps me to do that or tells me what to stay away from is very helpful. We focus on soil health and have read a lot of information on the subject to help us have healthy soil and maintain it.
- I am a researcher who has contributed to organic production methodologies and efficenicies
- I find this is an area extremely lacking in available resources that are helpful
- increase in consumer demand and retailer interest in providing organic offerings has increased awareness of other sustainability issues and ethical labels
- I don't know of any research that has gone on...so cannot answer these questions.
- Research has led me to believe: organics can meet populations' need.
- Allowed me to consider production ideas outside the box
- Specifically, the work that the Bauta Initiative on Seed Security has been doing with
  organic/ecological/low-input plant breeding has been incredibly valuable to our farm. The work itself id
  very important, but also the knowledge of doing that type of work on-farm is so important for the present
  and future generations of organic farmers to retain.
- Providing talking points for promoting our all organic products
- Have not seen much that really attracts the buying public







- I am a small sole proprietor and operate a market garden & greenhouse. This survey was sent to JUST Community Market Co-operative Ltd (I am a director), but the responses represent my own knowledge and beliefs. I'm sure that research and innovation is helpful for large organic operations, but this knowledge base is not always easily applied to smaller farms related to production with a limited landbase, limited financial supports or non at all, limited equipment, availability of inputs locally, etc. As for food nutritional value and health risk reduction, we need to do more research around how pesticide use and GMOs negatively impact our health and environment and make it easily accessible to the general public in plain language. I consider myself to be an informed and enlightened individual and know were to look for 'research' that is 'peer' reviewed. However, there is a lot of new ground-breaking information out there that is supported by science but there is always a lot of pushback from Big Ag, Big Pharma, etc and the allopathic medical system in general, to bury it! There needs to be a hub for the organic sector where 'all of the research' resides. Is there such a thing? As far as I know it is scattered all over the internet.
- With the increase in popularity of regenerative agriculture, it's been great to be able to share OACC resources on cover crops and soil health. I believe they are getting a wider reach because conventional and regenerative farmers are more interested in these topics.
- bcp de recherches depuis 20 ans!! tout a été fait en double en triple par tellement d'organisations ou d'agronomes a la recherche de fonds publics pour se créer des revenus! il y en a plus que suffisamment
- research has really sucked have to go MOSES, etc. other American organic institutions.
- many growers are frustrated by lack of relevant research.
- many growers have to try input products on their own with no idea if they work!
- What research and innovation??
- Learning about the complexity of biological systems has been intriguing and a main driver in pursuing this type of agriculture.
- not applicable
- La recherche m'a été utile pour comprendre les effets bénéfiques sur la santé des sols et sur l'environnement en général. La recherche m'a aussi permise d'identifier et d'utiliser des insectes prédateurs pour lutter contre les insectes nuisibles. La recherche m'a aussi permise de comprendre comment lutter contre les mauvaises herbes de manière efficace en régie biologique.
- Cropping methods. Seed/grain varieties. Health benefits.
- able to inform those around me and those I inspect about new research findings.
- able to communicate some of this to our customers





