

# Eastern Oilseed Development for Future Supply Chain Security, Sustainability and Success – 2023-2028

## Call for Proposals

#### ECODA Moving Forward - 4 Pillars of Research Focus for 2023-2028

There is no more important time in our recent history for agricultural innovation and industry collaboration than now. The recent global pandemic has highlighted the fragility of our food systems and supply chains, refocusing some of our priorities on regional food security. We have also been thrust into a market condition of scarcity in commodity cereals and oilseeds by the coupling of the Russian invasion of Ukraine and global commodity crop failures. Agriculture is continuing to be challenged by the impacts of climate change with increasing incidences of extreme weather events and altered growing season conditions overall. All these challenges however provide us all with the opportunity to find new ways to produce food for our world. In its 13<sup>th</sup> year of helping industry innovate, ECODA wants to be the catalyst to allow for industry to make these changes and build stronger supply chain networks for success.

Following discussions with funding agencies as well as established and new industry participants, areas of interest and a set of research priorities were created. These priorities reflect both the national strategy for long term climate action (reduction of greenhouse gas emissions from agriculture) as well as market driven priorities to meet consumer demands:

## Cropping systems/techniques for moderated climate impact, reduced GHG emissions and improved input use efficiencies

- Crop rotations for improved soil health, economic returns, and efficient amendment use
- Expansion of Intercropping systems
- Use of biostimulants to improve crop use efficiency of nutrients and stress response
- Regenerative agriculture systems
- Biofumigant crop options for high value rotation
- Compost applications and waste upcycling for improved crop yields in low OM soils



#### Increasing crop diversity for environmental and economic sustainability

- Targeted variety development for export markets
- Targeted variety development for value-add opportunities (food, feed, industrial use)
- New novel crop agronomics targeting high value oilseed markets (food, feed and industrial)
- New crop rotation options with both economic potential and improved soil health
- Variety development for climate adaptation
- Variety development for improved feed quality

## Regional oilseed and plant protein supply chain development for long term economic resiliency

- Regional assessment of plant protein supply chain potential
- High value oil extractions, manufacture, co-product streams
- Plant protein product and value chain development
- Supportive services development

## Technology applications for improved response to market and climactic fluctuations

- Improved variety selection through use of AI to increase development speeds
- Large data predictor models for crop selection
- Al data systems development for improved crop efficiencies

#### **Proposal Process**

ECODA follows the five-year federal funding cycle as dictated by Agriculture and Agrifood Canada (AAFC). Although ECODA's research program has grown significantly in the last decade we do not pursue Cluster funding as we remain regionally focused on Eastern Canada (Ontario eastward). We wish to maintain the flexibility to support diverse projects that support the complete oilseed supply chain. As such, we apply under the AAFC large AgriScience Project funding that will follow the Cluster call in Fall 2022.

To be prepared for the anticipated Fall call for proposals from AAFC, ECODA would like to have its full roster of projects prepared by September. We are now open to receive letters of intent (LOI) from industry and researchers and will receive LOIs until end of day August 31, 2022.



ECODA science coordinators and review team will evaluate all submitted LOI and either request further information or advance them to full proposal stage within 10 business days.

Full proposals will be required by end of day October 14, including detailed budgets. Letters of Support from industry partners will also be requested as part of the full proposal. ECODA is a not-for-profit organization and therefore all research projects should have industry support to contribute matching funds.

\*Please note that new federal funding model has been adjusted for the next round and only those projects with greenhouse gas (GHG) emission reduction components will be considered for up to 70% funding. All other projects requesting funding are eligible for maximum 50% support.

#### Letter of Intent (LOI) requested format

- a. Summary Statement (1 paragraph)
- Answer the following: Who wants to do what? How much is being requested? Is this a
  portion of a larger project cost? Over what period is money being requested?
- b. Statement of Need (1-2 paragraphs)
- Explain what issue you are addressing and why important to industry, who will benefit
- c. Project work plan (high level overview of scientific plan)
- Give an overview of the tasks involved (can be point form).
- Indicate any collaboration with other organizations and what their roles will be.
- d. Anticipated Outcomes (point form)
- State the specific outcomes you hope to achieve.
- e. **Budget**
- General description of the projects funding needs and total amount of request.
- f. **Signature(s)** (signature from Lead Investigator as well as industry support representative (if relevant))



### 4 Anticipated Timeline for Proposals

- LOI due August 31, 2022
- Full Proposal due October 14, 2022
- ECODA stage 1 proposal to AAFC January 2023
- ECODA Stage 2 proposal to AAFC March 2023