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Purpose of Letter of Intent (LOI)

- To provide an opportunity for researchers to express their interest in being part of the National Hemp Cluster (2018-2023).
- Screen and provide direction on proposed research for its relevance and potential impact on the hemp sector.

Who can apply

- University scientists in Canada
- Government scientists in Canada
- Private sector researchers in Canada

Notes:

- Private sector researchers are encouraged to work with the Government or University scientists.
- The work must be based in Canada and relevant to hemp in Canada.

Projected Timelines (2017)

It is anticipated that the funding agency will be in a position to receive Cluster proposals sometime in the fall.

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
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<tbody>
<tr>
<td>Deadline for LOI submission</td>
<td>April 21, 2017</td>
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<tr>
<td>LOI Applicants notified and full proposals invited</td>
<td>May 12, 2017</td>
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<tr>
<td>Deadline for researchers to submit peer reviewer suggestions</td>
<td>May 26, 2017</td>
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<tr>
<td>Proposals sent out for peer review (3)</td>
<td>June 16, 2017</td>
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<tr>
<td>Peer review completed</td>
<td>July 14, 2017</td>
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<tr>
<td>Notice of acceptance, revisions and other details</td>
<td>August 11, 2017</td>
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<tr>
<td>Revised activity proposal submission with all documentation</td>
<td>September 11, 2017</td>
</tr>
<tr>
<td>Proposal submission to AAFC</td>
<td>October 15, 2017</td>
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Matching Funding Requirements and Budget
The details related to the matching funding requirement for the Cluster program will not be known until later this year. Currently CHTA does not have a levy or check-off program however it is currently working on the development of a check-off that is anticipated to be in place for 2018.

Research Areas
The CHTA members and expected funding consortium partners have developed a list of national hemp research priorities that they wish to have addressed through the cluster under the next APF. This list is not comprehensive, but rather highlights strategic priorities that need to be addressed in order to enhance the profitability and sustainability of Canada’s hemp industry. National research priorities for hemp include, but are not limited to, the following:

Fibre
- Fiber yield/quality of seed varieties vs dual purpose varieties + economics.
- Harvesting of dual purpose varieties to maximize fibre quality.
- Retting methods to fulfill specific requirements of various end users of fibre + economics.
- Novel uses of hemp post-decortication residues.
- Life Cycle Analyses and recyclability of hemp fibre products.

Food and Health
Effects of dehulled hempseed, hempseed oil and hemp protein:
  a. Biomarkers for Cardiovascular disease: Serum lipids, inflammatory biomarkers, etc.
  b. Biomarkers for diabetes: Glucose, insulin sensitivity, hemoglobin A1C, etc.
  c. Satiety and weight control

Agronomy

Production
- Maximum economic fertility levels
- Green manure varieties and termination dates for maximum soil nutrition
- Effects of extreme seeding dates – yield, height, biomass
- Economics of soil amendments
- Evaluating new weed control products or methods - Minor Use – conventional and biological pest controls
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Harvesting
• Modifications to equipment – saving more seed during high moisture harvesting
• Reducing aeration drying time – horizontal air flow in bins
• Harvest techniques to allow for and maximize whole plant utilization
• Methods of incorporating all post-harvest fiber

Feed
• Assessment of the efficacy and safety of (whole hemp, hulled hemp, hemp meal, hempseed oil, screenings, hulls and chaff) as an animal feed; poultry, swine, dairy, beef.

Out of Scope Research
LOIs will not be accepted for: marketing/market development, public trust/social license, international development, regulatory work, social sciences.

LOI Form Instructions

Part 1: Researcher Information
Applicant is defined as the Principal Investigator. Collaborator is defined as other researchers or organizations who will be involved in the Project. These are collaborating researchers who will receive a portion of the budget or who will be making a substantial direct contribution to the work. Collaboration between AAFC and university researchers is encouraged.

Part 2: Title and Executive Summary of the Proposed Project
Applicant must provide a title for the project and an executive summary. Executive Summary should provide, in bullet form, the project objectives and a clear description is required of how the proposed project will benefit hemp producers and the hemp value chain. The Executive Summary should not exceed 250 words.

Part 3: Project Background
• Indicate which national hemp research priority (ies) are being addressed within the LOI.
• Describe the research gap(s) being addressed and how the project will address those gaps.
• Describe how the proposed project will advance the Canadian hemp industry in the areas of innovation, environmental sustainability (climate change), risk management, public trust, value-added agriculture and/or the ability to develop market opportunities.

Project Background should not exceed 500 words.
Part 4: Deliverables
Using the objectives identified in Part 2:

- Identify measurable final outcomes and deliverables and how they will contribute to the hemp industry in Canada.
- Include measurable targets by year, indicating incremental research progress and annual milestones for each objective.
- Ensure research targets are specific, measurable, achievable, relevant and time-based.

Part 5: Experimental Approach and Activities Overview
Using the objectives identified in Part 2:

- In concise point form outline the key activities and scientific approaches that will be used within each objective to achieve the deliverables described in Part 4.
- Basic experimental design should be included, but detailed methodology will only be requested at the full proposal stage.

Part 6: Commercialization
Provide a brief description of the plan and projected timeline for commercial adoption or uptake or project deliverables.

Part 7: Knowledge Transfer Plan
Provide a brief overview of how the results of the research will be disseminated to the hemp sector. Indicate partnerships that will be established to support this knowledge dissemination. A detailed communication plan will be expected in the full proposal.

Part 8: Estimated Budget and Duration
- Project must fit within the next APF timeline of five years or less April 1, 2018 to March 31, 2023
- Start Date (mm/dd/yy)
- End Date (mm/dd/yy)
- Duration (mm/dd/yy)

Budget – must not exceed $1 M in total for the five years.

Incremental Salaries
Equipment
Supplies
Travel & Hospitality
Service Contracts
Incremental Overhead
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Incremental Rent
Other* (provide additional information on ‘Other’ if applicable)
Overall Budget

Additional confirmed or potential sources of funding (if applicable)

Submission Deadline
Deadline for submission is 4:00 pm CST Friday, April 21, 2017.

Submit your completed LOI using the electronic form provided. All LOI submission will receive an email confirming receipt with 2-3 business days.