Synergy of Using Field Peas as an Ethanol Feedstock

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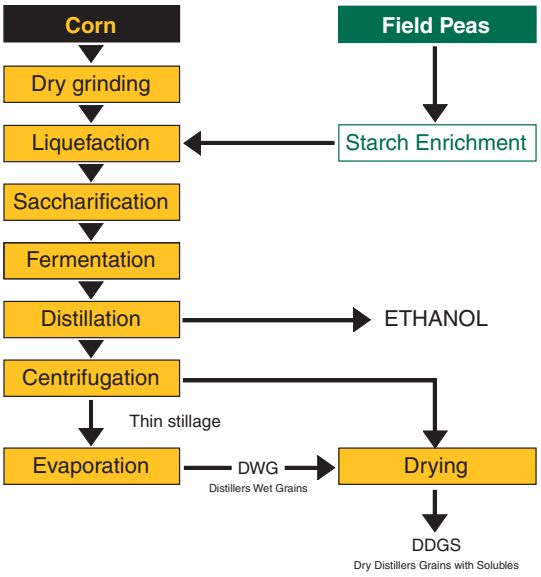
Project Goal: Determine the technical and economic feasibility of using field peas as a supplemental ethanol feedstock in North Dakota

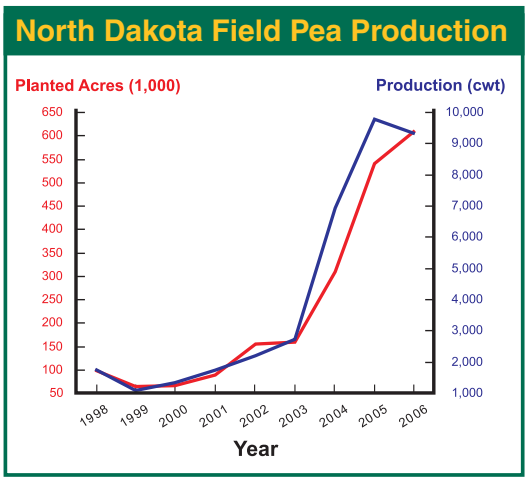
Specific objectives are

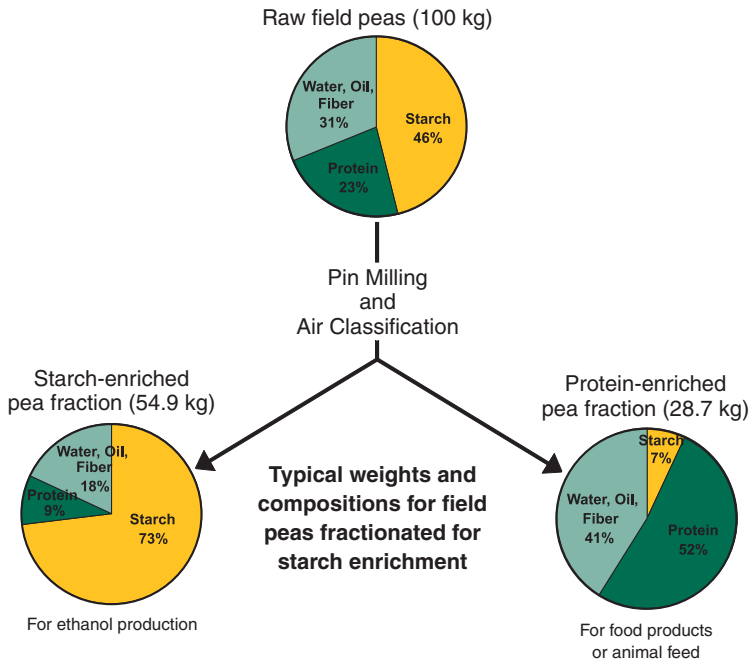
1) Investigate technical feasibility and logistics of using fractionated pea starch in North Dakota ethanol plants
2) Determine economic feasibility of North Dakota farmers increasing pea production, including assessment of agronomic and economic risk/returns
3) Access synergies of vertically integrating pea fractionation with existing and potential ethanol production activities in North Dakota



Project Motivations

- North Dakota has two operating ethanol plants, four plants in various stages of construction and several other projects under consideration.
- Not enough corn is raised in the state to meet the demand of these plants.
- Increasing the state's corn acreage enough to meet this need is unlikely because of the region's arid climate and limited irrigation potential.
- Field peas provide a nitrogen credit of 40 pounds per acre of N for the next crop.
- Field peas grow well in parts of North Dakota not well-suited for corn.
- Pea utilization would allow a greater share of North Dakota producers to directly benefit from the starch ethanol industry expansion.





NDSU

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