Integrated Management of Cropland Pests (IMCP)

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Goal
Develop IMCP strategies that are:
- Environmentally sound
- Productive
- Profitable

Weeds
- Relative effectiveness of control measures
- Population shifts associated with changes in agronomic inputs
- Long-term changes to seedbank

Agronomy
- Crop establishment and development
- Fertility requirements
- Moisture utilization
- Yield and quality

Insects
- Dynamics of beneficial insects and soil arthropods
- Damage from oilseed and cereal pests
- Forecasting insect emergence

Environment
- Meteorological conditions
- Effects of management practices
- Soil and canopy temperatures
- Correlation with crop and pest development

Diseases
- Severity of foliar diseases
- Assessment of new fungicides
- Quantification of disease impact

Economics
- Relative costs, returns, risk issues
  - Cost effectiveness of IPM control options
  - Total annual economic losses from residual crop pests

Outcome
- Recommendations for IMCP
- IMCP Fact Sheets
- Increased awareness among SK producers

Experimental Sites
- Saskatchewan Wheat Pool Research Farm, Watrous SK
- Kernen Crop Research Farm, Saskatoon SK

Management systems
- Four year rotation (1997-2000): wheat, canola, barley, pea
- Six herbicide x tillage systems
- Varying seeding dates and rates
- With/without foliar fungicides
- Insecticides as required

Additional Project Participants