# Integrated Pest Management in Canola

## A NAFTA initiative with the Pest Management Regulatory Agency & the Canola Industry

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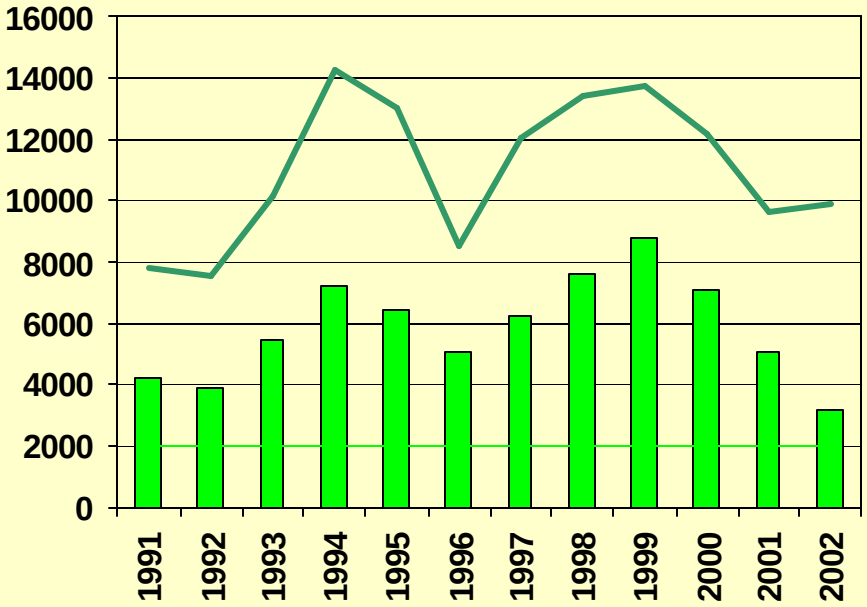



# Canada's most important oilseed crop


## Comparison of Dietary Fats

| DIETARY FAT | Fatty acid content normalized to 100 per cent |
|---|---|
| Canola oil | 7% · 21% · 11% · 61% |
| Safflower oil | 10% · 76% · Trace · 14% |
| Sunflower oil | 12% · 71% · 1% · 16% |
| Corn oil | 13% · 57% · 1% · 29% |
| Olive oil | 15% · 9% · 1% · 75% |
| Soybean oil | 15% · 54% · 8% · 23% |
| Peanut oil | 19% · 33% · Trace · 48% |
| Cottonseed oil | 27% · 54% · Trace · 19% |
| Lard* | 43% · 9% · 1% · 47% |
| Beef tallow* | 48% · 2% · 1% · 49% |
| Palm oil | 51% · 10% · Trace · 39% |
| Butterfat* | 68% · 3% · 1% · 28% |
| Coconut oil | 91% · 2% · 7% |

* Cholesterol Content (mg/Tbsp): Lard 12; Beef tallow 14; Butterfat 33. No cholesterol in any vegetable-based oil.
Source: POS Pilot Plant Corporation, Saskatoon, Saskatchewan, Canada June 1994

SATURATED FAT

MONOUNSATURATED FAT

POLYUNSATURATED FAT

Linoleic Acid

Alpha-Linolenic Acid
(An Omega-3 Fatty Acid)

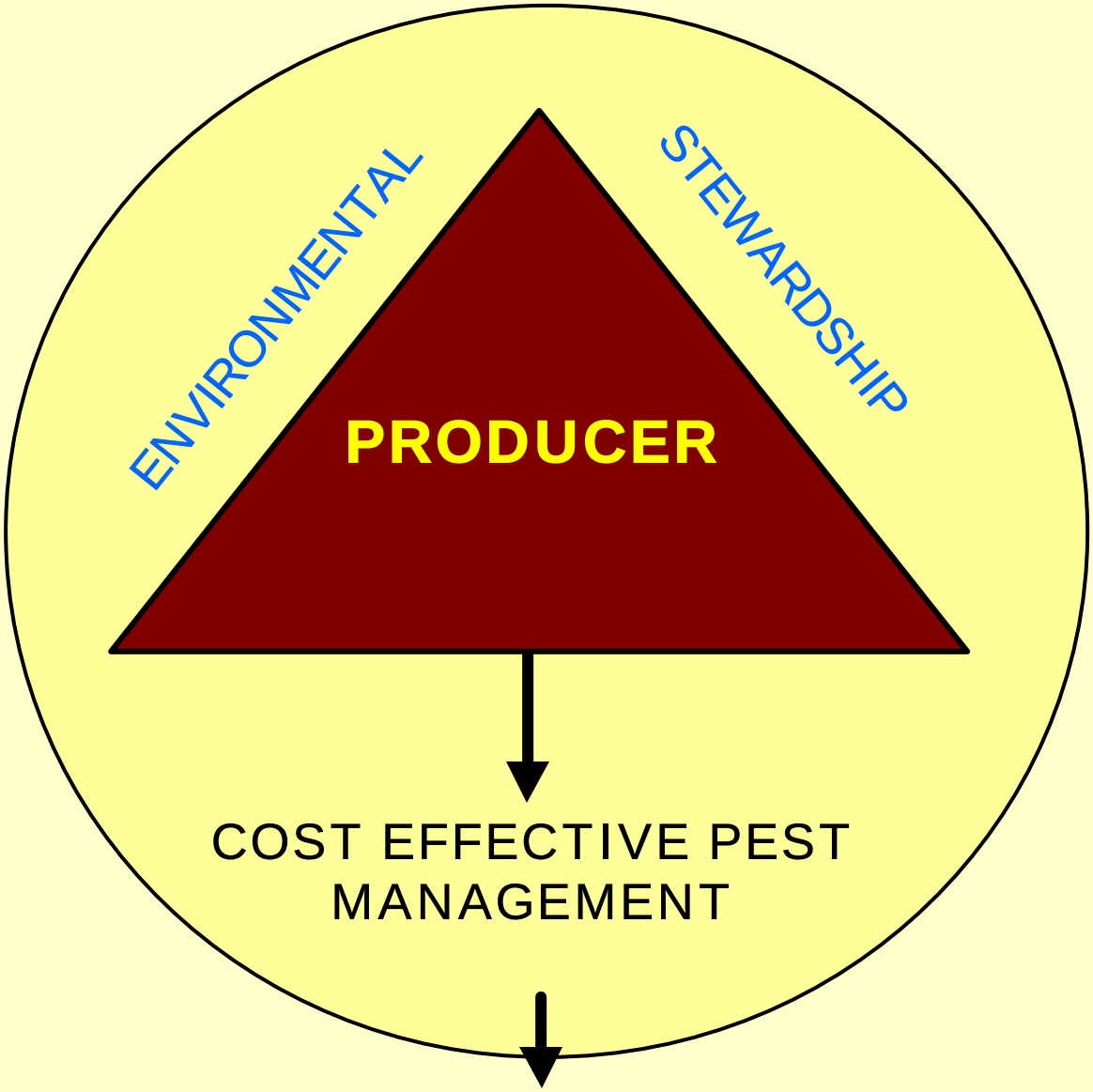
# ACCESS TO IPM TOOLS

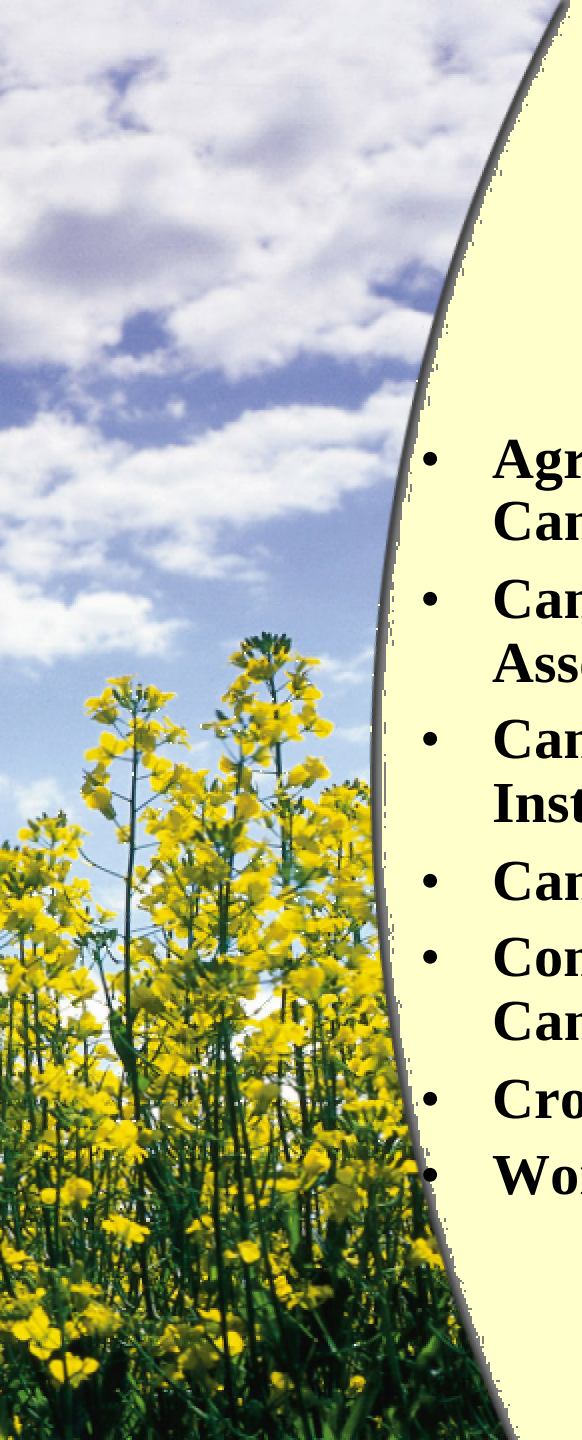
**Chemical**

**Joint Registration** **FQPA & Re-evaluation**

**Cultural**

**Biological**


ENVIRONMENTAL
STEWARDSHIP
PRODUCER
COST EFFECTIVE PEST MANAGEMENT
MARKETS & CONSUMER



# Canola IPM Working Group

- Agriculture & Agri-Food Canada
- Canadian Canola Growers Association
- Canadian Fertilizer Institute
- Canola Council of Canada
- Consumers Association of Canada
- Crop Protection Institute
- World Wildlife Fund
- Pest Management Regulatory Agency
- U.S. Environmental Protection Agency
- Provincial & state Governments
- University Researchers
- U. S. Canola Association
- Canadian Seed Trade Association

# IPM Strategic Plan

- **Cataloguing all Pest Management Tools**
- **Developing a system for Bench-marking and monitoring IPM Adoption**
- **Development of New Pest Management Tools**
- **Information Transfer to Growers**

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# Cataloguing all Pest Management Tools: the Canola Matrix

| Strategy | Biology / Management Factors | Diseases | Insects | Weeds | | Crop | Environment | Health |
|---|---|---|---|---|---|---|---|---|
| | | | | Grasses | Broadleaf | | | |
| Pest biology | | | | | | | | |
| Cultural control | | | | | | | | |
| Chemical control | | | | | | | | |
| Biological control | | | | | | | | |
| *Brassica* sp. (Genetic) | | | | | | | | |
| Forecasting/ Prediction | | | | | | | | |

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# A System for Bench-Marking and Monitoring IPM Adoption

- Measuring IPM adoption
- What are producers doing now?
- What are the barriers to using IPM?
- What information do producers want?
- How do we measure their progress?

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## Baseline Survey

# Development of New Pest Management Tools

- Filling in the gaps
- Multiple tactics
- IPM-compatible tools
  - Reduced-risk pesticides
  - Cultural practices
  - Biologicals

# Information Transfer to Growers

- Regional IPM teams
- On-farm demonstrations
- Provincial extension services
- IPM Fact Sheets, Insect Sweep Card and IPM Journal
- Training tools for agronomists

# Evolution of the Pest Management Matrix

Key Pests

IPM Components & Management Factors

Sources of Information

Data Entry, Synthesis and Review

Combine with other Information Tools

Web-Based Information System

# Integrated Management on the Farm


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# Next Steps

- **Plan for on-farm projects:**
  - **–“Canola Watch”**
  - **–Flea beetle management**
  - **–Profitability Challenges**

# Next Steps

- **Transition to Risk Reduction Strategy**
  - **Crop Profile**
  - **Re-visit pest management priorities**