

Intercropping

Beneficial Management Practices (BMPs)

Intercropping is an agricultural practice where two or more crops are grown simultaneously in the same field. Intercropping reduces nitrogen use and increases soil health using soil-building crops. To qualify for RALP, the practice must be carried on for three years, but it can be on different fields each year.

HOW TO START AN INTERCROPPING PROJECT

- Interplant two annual crops at the same time, including one pulse.
- Harvest both crops, either as seed or forage.
- Consider using an inoculant to improve germination success.
- If crops are grazed, installing perimeter fencing and off-site watering systems may benefit the project.

Note: You may wish to consult an accredited technical advisor (e.g. Professional Agrologist, P.Ag or Certified Crop Advisor, CCA) to develop or support your management plans.

Management Benefits

Increased Yield and Productivity

- Intercropping often results in higher total yields compared to monoculture, as crops can complement each other in terms of nutrient use, growth habits, and resource utilization.
- Diversifying crops can mitigate production risks associated with weather, pests, and diseases.

Resource Use Efficiency

- Efficient use of sunlight, water, and soil nutrients as different crops with varying needs are grown together.
- Reduced competition for resources between crops due to differences in rooting depths and nutrient requirements.

Weed and Pest Management

- Reduced weed growth as the canopy cover from different crops shades the soil.
- Natural pest control as certain crops may act as repellents or attract beneficial insects.

Improved Soil Health

- Crop diversity promotes a healthier soil microbiome and reduces the risk of soil-borne diseases.
- Less soil erosion due to continuous ground cover.

Economic Benefits

- Diversified income streams from multiple crops.
- Potential cost savings on inputs like fertilizers and pesticides.

Financial support provided under the Sustainable Canadian Agricultural Partnership, a federal-provincial-territorial initiative.

Key Considerations

Crop Selection

- Choose crops with compatible growth habits, nutrient requirements, and maturity periods.
- Consider the market demand and economic viability of selected crops.
- To qualify for RALP, at least one of the crops must be a pulse.

Spatial Arrangement

- Determine the optimal arrangement and spacing between crops to avoid competition for resources.
- Consider factors like light interception, water use efficiency, and accessibility for harvesting.

Rotation and Succession Planning

- Plan crop rotations and successions to optimize the use of nutrients and break pest and disease cycles.
- Rotate crops with different growth habits to maintain soil fertility.

Pest and Disease Management

- Be mindful of potential pest and disease interactions between crops.
- Implement integrated pest management (IPM) strategies to minimize the use of chemicals.

Harvesting Considerations

- Consider differences in maturity periods when planning for harvesting.
- Choose crops that can be easily harvested together or have compatible harvesting equipment.

Start a Project Today

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