

Integrated Pest Management in Quebec Cranberry Bogs

Didier Labarre

dlabarre@notrecanneberge.com



Who are we?



Quebec Cranberry Growers Association
Research dept.



Club environnemental et technique Atocas Québec

Non-profit crop consult



Who are we?



- ≈ 20 ongoing research projects
- 100% membership in Quebec (few NB growers)



- 75% membership in Quebec
- 7 ag. Consultants (member of the QC professional order)
- 5 Team Managers
- ≈ 20 scouts



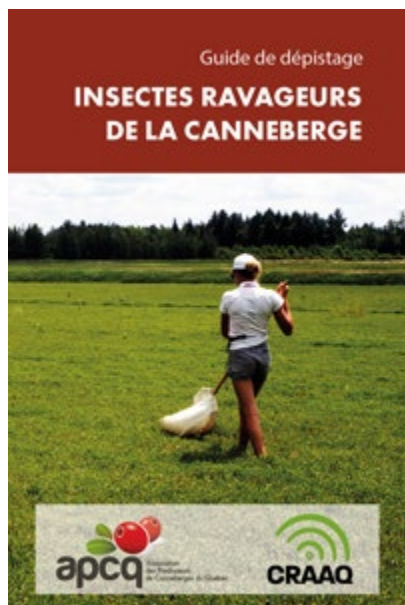
Integrated Pest Management (IPM)

IPM is the careful consideration of all available pest control techniques and subsequent integration of appropriate measures that discourage the development of pest populations (FAO, 2021).

- Knowledge (acquisition & transfer)
- Prevention
- Monitoring
- Intervention
- Feedback



Documenting Best Practices and Technical approach



Insect Pest
Scouting
French



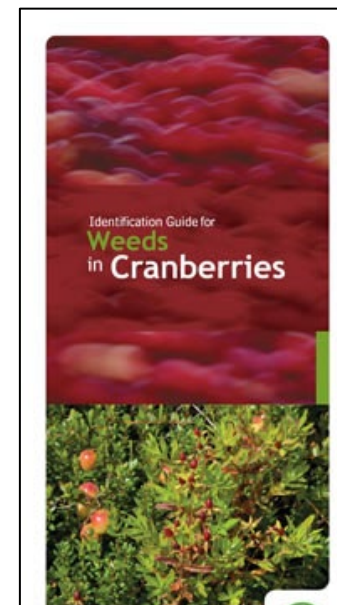
Insect Pest
Scouting
Spanish



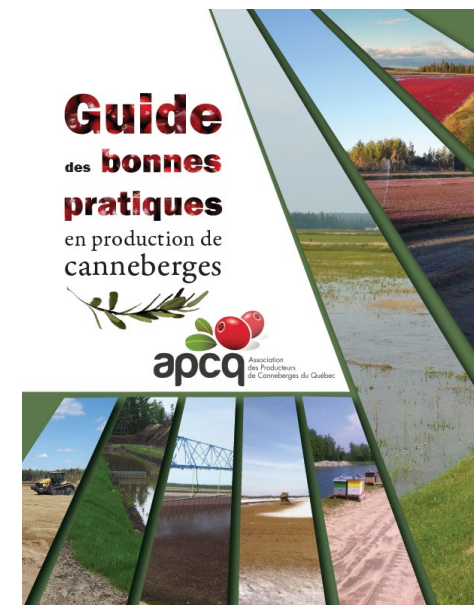
Insect Pest
Identification
French



Weeds
Identification
French



Weeds
Identification
English



Best Practices
French

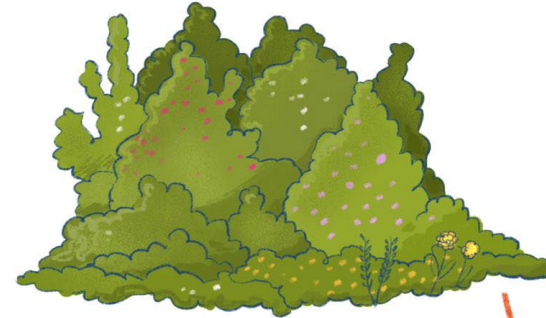


Prevention

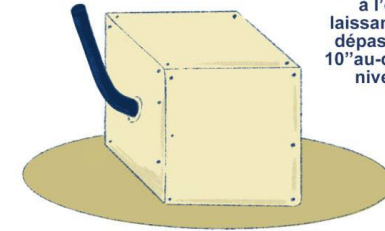
- Choice of cultivars
- Rational use of water
- Rational use of pesticides
- Rational use of fertilizer (4R)
- Canopy management
- Planting technique/density
- pH management
- Sanding
- Dikes grass cover
- Farm landscaping



* Planter des plantes à fleurs diversifiées, ayant des périodes de floraison qui se succèdent, d'avril à octobre

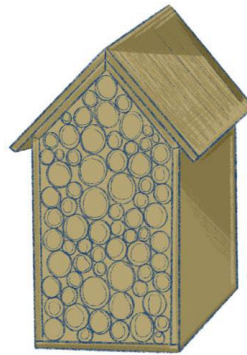


BANDES OU ÎLOTS FLEURIS *



Enfouir dans le sol, à l'ombre, en laissant le tuyau dépasser de 4 à 10" au-dessus du niveau du sol

INSTALLATION DE NICHOS À BOURDONS



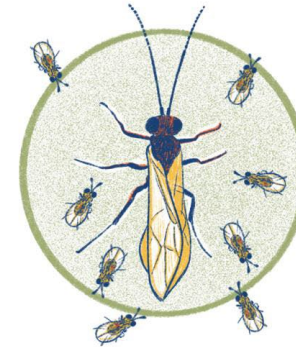
Environ 1"

INSTALLATION DE NICHOS À ABEILLES SOLITAIRES

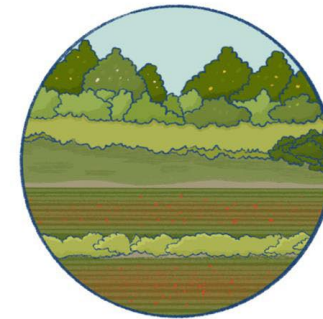
- Doit être nettoyé annuellement pour éviter la propagation de maladies;
- Comporte de 10 à 20 trous ou tubes fixés d'au moins 3 tailles différentes, ouverts à un seul bout;
- Construit en bois non traité;
- Installé entre 3 et 10' du sol.



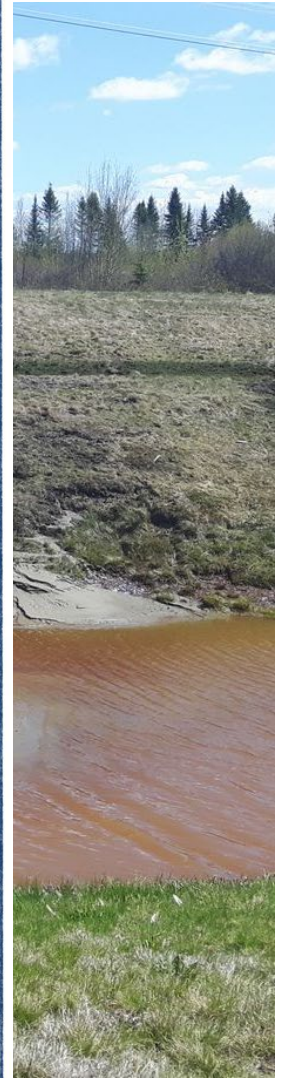
ÉVITER L'UTILISATION DES PESTICIDES RÉPUTÉS TOXIQUES POUR LES ABEILLES SELON SAgE PESTICIDES



FAVORISER LES INSECTES ALLIÉS



CONSERVER LES HABITATS EXISTANTS / AMÉNAGER DES HAIES DIVERSIFIÉES / ÉVITER LA FAUCHE



Monitoring

May

June

July

August

September

October



BHFW 1st gen
Spanworms
Weevil
Noctuids



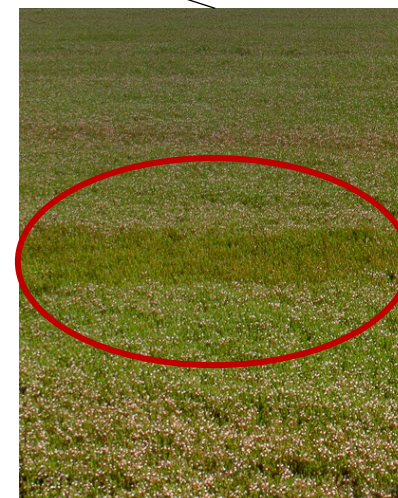
BHFW
CFW
SPARG
Girdler



CFW



CFW



Geometrids



BHFW 2nd gen



Intervention

Spring & fall flooding
1500 acres in 2022



Biocontrol
Trichogramma sp.

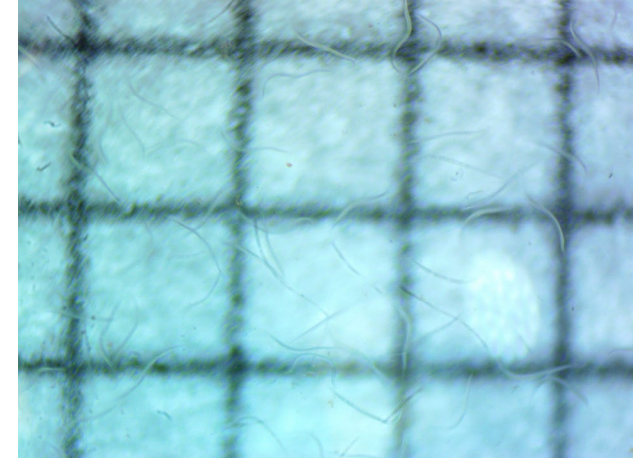


© Anatis bioprotection

Mating disruption



Biocontrol
Nematodes



Intervention

Product choice



Equipment



Window of intervention



SAGE
PESTICIDES



Cornell University

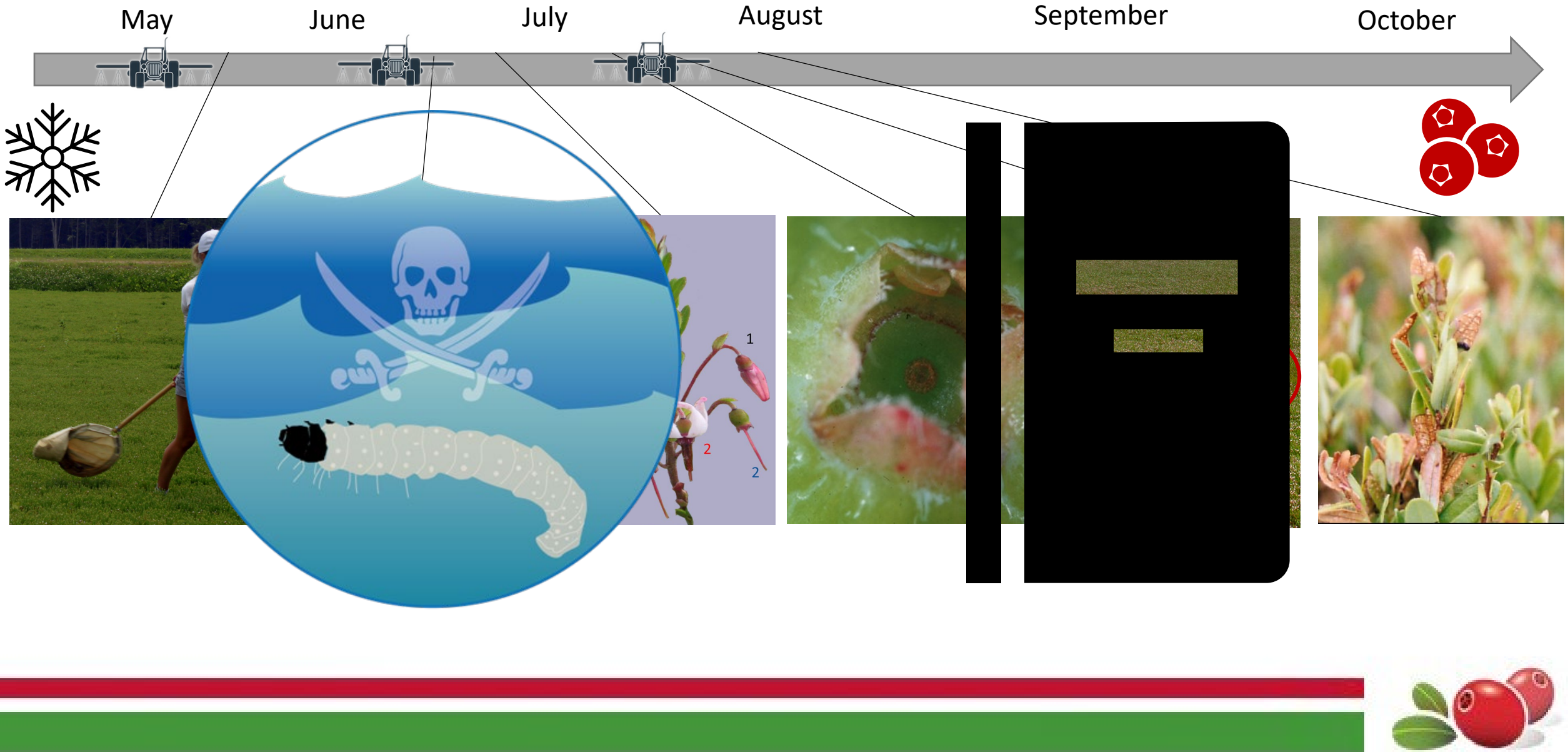
IRE-IRS

IEQ

Environmental Impact Quotient



Feedback



Thank you!

