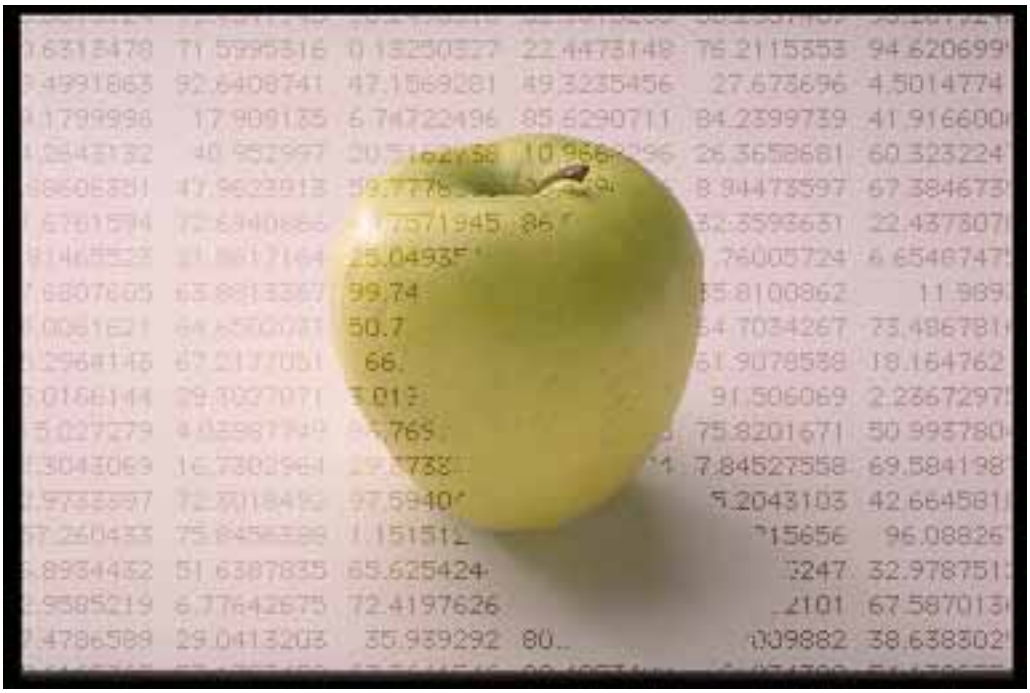
Crop Profiler

A database application for compiling FQPA crop profile information



User's Guide

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A database application for compiling FQPA crop profile information

What is it?

Crop Profiler is a FileMaker Pro runtime application designed to make it easier to collect and organize the information required to prepare a crop profile (based on the crop profile template prepared by the Office of Pest Management Policy). You can then export the crop profile in a format that can be opened by most major word processors for final editing.

Requirements

Macintosh

- Any Macintosh, Power Macintosh, or compatible computer running System 7.1 or later
- A hard disk and 4 MB of RAM (8 MB or more recommended)

Windows

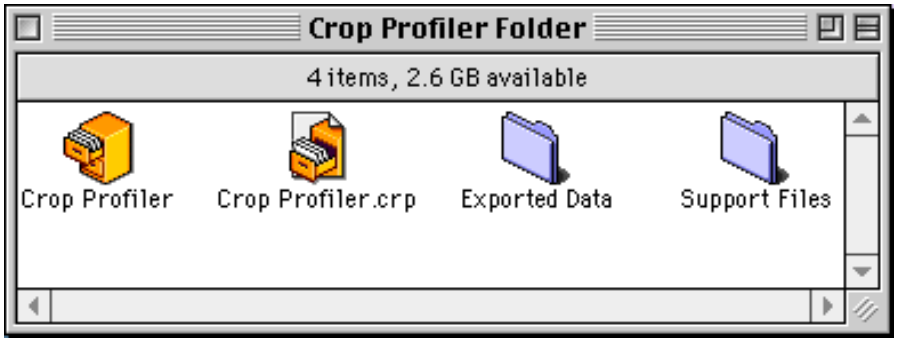
- Windows 95, 98 or NT
- Any Intel-compatible 486/33 or faster computer with at least 8 MB of RAM
- A hard disk

These are the minimum requirements. Better results will be obtained with more RAM and at least Pentium or PowerPC class processors.

Installation

Mac

When you download the compressed file that contains the Crop Profiler program, your web browser should automatically decompress it. If not, locate the file named "Crop Profiler(Mac).sit" and double-click on it. If you have Stuffit Expander installed, it should launch and decompress the file (Stuffit Expander can be obtained from http://www.aladdinsys.com/). Once the archive is decompressed, copy the folder named "Crop Profiler Folder" to wherever you keep your application programs (usually the Applications folder at the top level of your hard drive). When you are done, the folder should look like this:



Note: Although many of the screenshots in this guide are from the Mac version of the application, they should be applicable to the Windows version as well.

Windows

When you download the zip file that contains the Crop Profiler program, your web browser should automatically decompress it. If not, locate the file named "Crop Profiler(Win).zip" in your download directory and double-click on it. The program you have registered to open zip archives should launch and decompress the file (freeware zip utilities can be obtained from http://www.cdrom.com/pub/infozip). Once the archive is decompressed, copy the folder named "Crop Profiler Folder" to wherever you keep your application programs. When you are done, the folder should look like this:

Quick Start

Mac

Double click on the Crop Profiler icon:

Windows

Double-click on the Crop Profiler.exe icon:

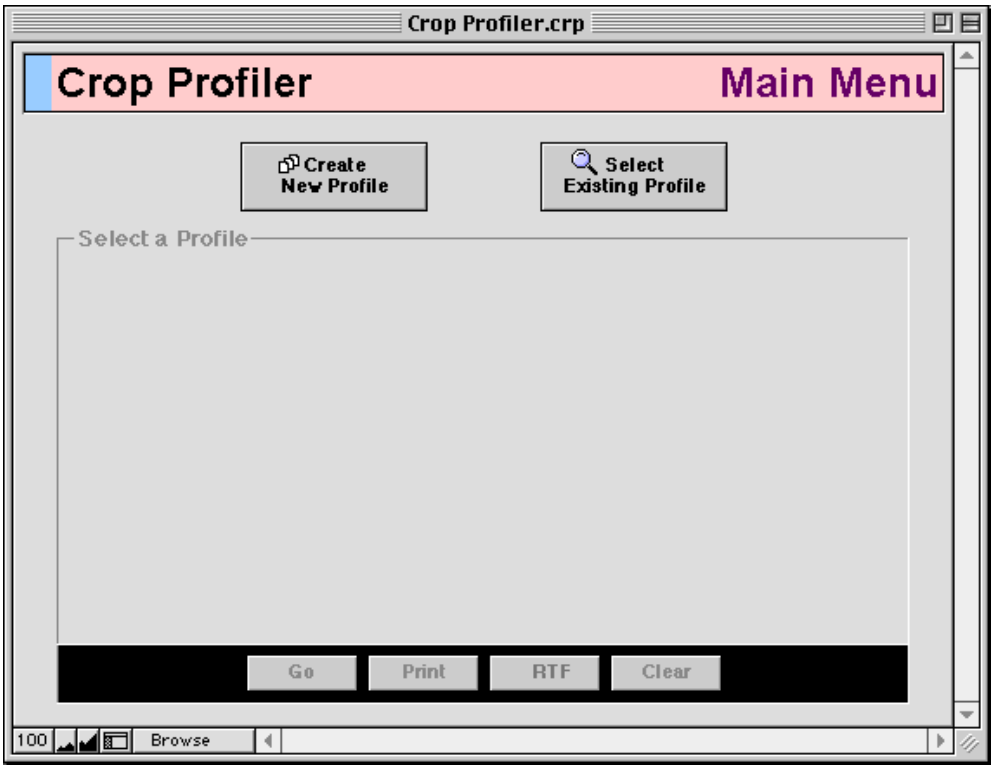
The Crop Profiler application will launch and open the **Main Menu** screen. The Main Menu screen acts as a control panel for the database, allowing you to perform actions and navigate through information. The Main Menu screen is covered in depth in the next section of this document. At the Main Menu you have the choice of starting a new crop profile, or selecting an existing profile. You can jump directly to different parts of the profile as well. You can also print the entire profile, or specific parts of it, and export the profile in a format suitable for word processors.

If you choose to enter profile data, the process is fairly straightforward. The program is organized into different data entry **screens** that each contain **fields** in which you enter data. You can use the tab-buttons to move between screens – the frontmost tab indicates the current screen. In the picture below, "Cultural Practices" is the current screen.

Another way to move between screens is to press Command-1 (Control-1 on Windows) to move forward one screen and Command-2 (Control-2 on Windows) to move back one screen. To enter data into a field, either click in the field or use the tab key on the keyboard to move between fields. Don't worry if you type more data into the field than is displayed; the data is still there.

The Main Menu Screen

When you first launch the Crop Profiler database, the Main Menu screen is mostly blank.



Create New Profile

If this is your first time launching Crop Profiler, click the 

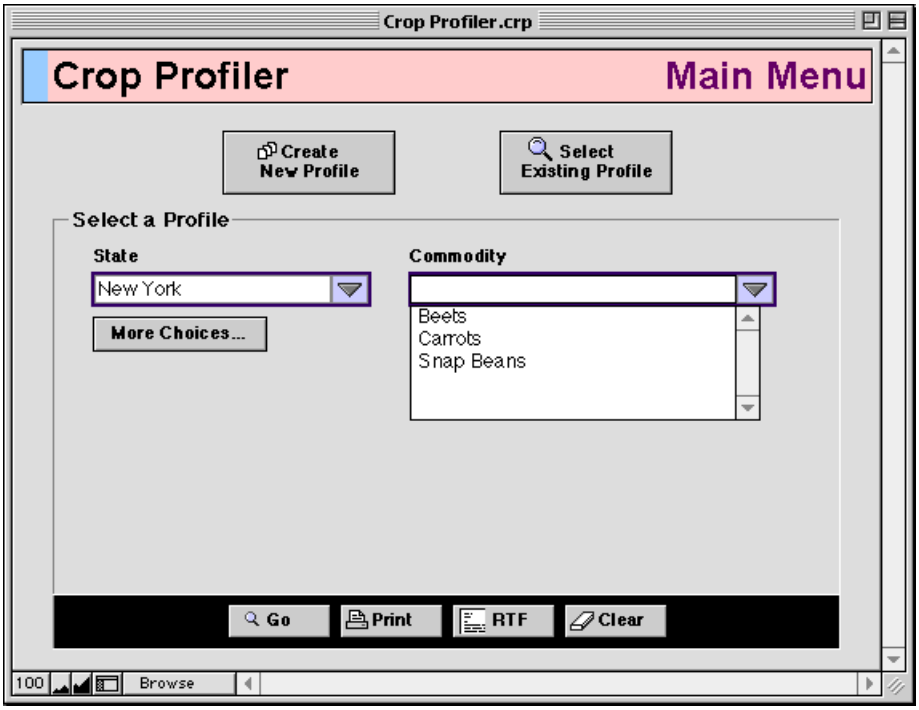
button, because you have not yet entered any crop profile information. A new crop profile record will be started and you will be taken to the **Profile Info** screen.

Select Existing Profile

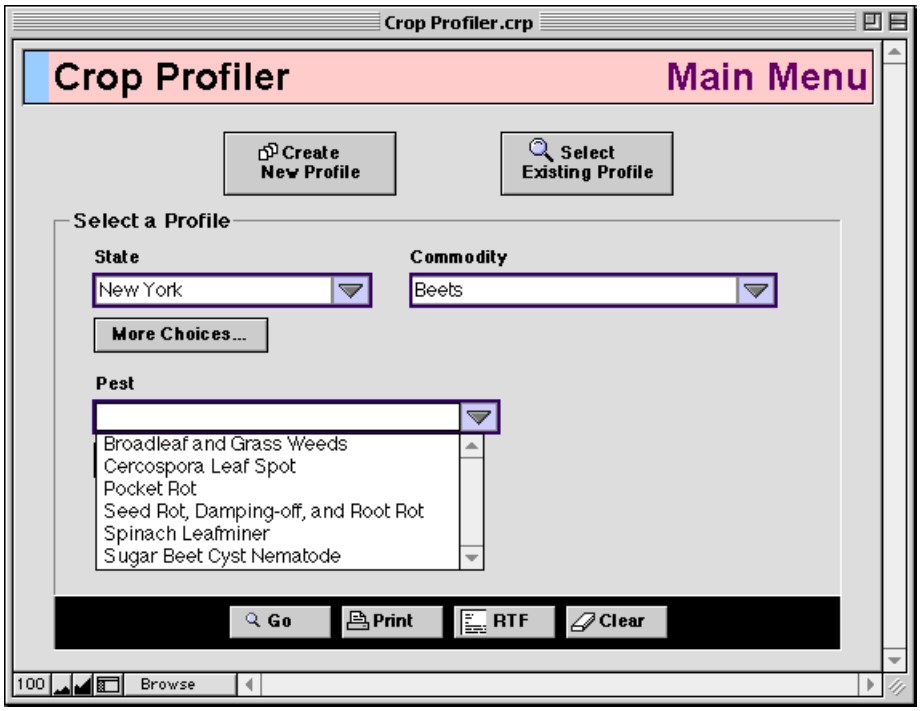
If you have entered profile information previously, you can still choose to enter a new profile, or alternatively, click on the 

button. This action enables the buttons at the bottom of the Main Menu screen, as well as revealing a set of drop-down boxes for state and commodity.

To navigate to an existing profile, use the drop-down lists to choose a state and commodity. Click on the arrow beside the box, or the box itself. A list will drop down, containing values for the profiles that have already been entered into the database.

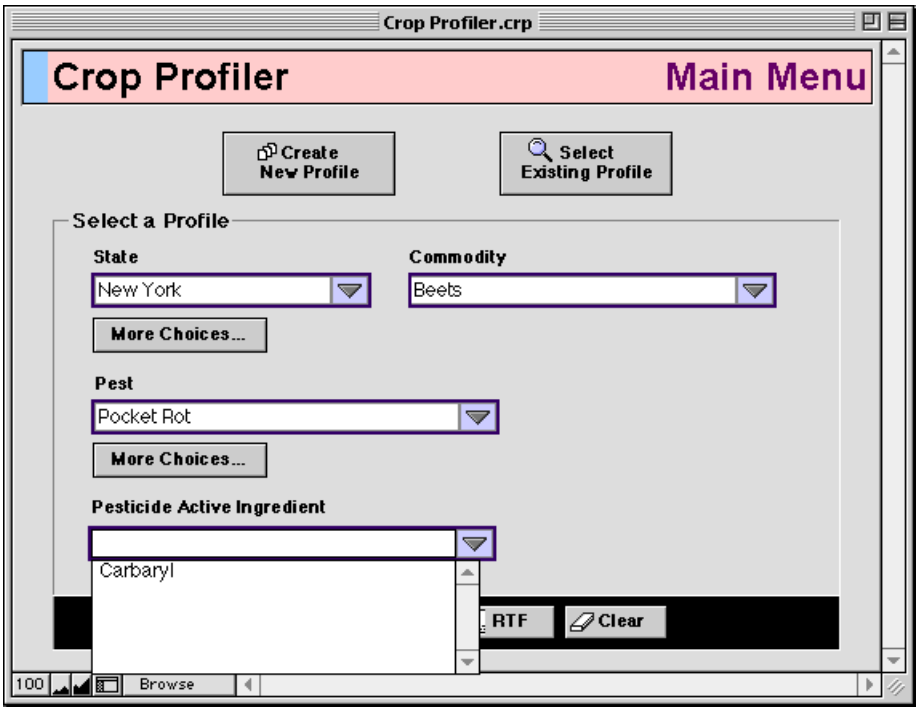


Select the state and commodity for the profile you want to work with. Click the Go button to be taken to the **Profile Info** screen for the profile you selected (see the **Data Entry** section).
If you choose not to go directly to the Profile Info screen, you may click the More Choices... button to reveal a drop-down list of pests that are associated with the commodity:



Once you've selected a pest, if you click the Go button you will be taken directly to the **Pest Info 1** screen for that pest (see the **Data Entry** section).

If you choose not to go to the Pest Info 1 screen, you may click the second More Choices... button to reveal another drop-down menu, this time listing the chemical controls associated with the pest chosen previously:



Clicking the Go button this time will take you directly to the **Chem Info 1** screen for the selected active ingredient.

Additional Options

The other three buttons at the bottom of the main menu perform specific tasks. Clicking the Print button will print all the different parts of the currently selected crop profile (throughout this document, the currently selected crop profile means the one selected in the Main Menu screen). You will have a chance to cancel printing if you hit the button inadvertently.

Clicking the RTF button exports the data of the current selected profile in Rich Text Format, which is a format that can be opened and edited by most word processors. The RTF file is called "Profile.rtf" and is saved inside the Crop Profiler folder when you click the RTF button. You should open this file in your word processor and save it under another name, because the "Profile.rtf" file is overwritten each time you click on the RTF button.

Clicking the Clear button returns the Main Menu screen to the state it's in when you first launch Crop Profiler.

The Status Area

The status area helps you navigate through the database. It is available in every data entry screen. It tells you which screen you're currently entering data into, and how many profiles, pests, or chemicals you've entered into the database. It also has buttons for several common actions.

Screen Name

Shows the name of the current screen.

Rolodex

Click the top card in the Rolodex to go to the previous record. Click the bottom card in the Rolodex to go to the next record. The number at the bottom-right corner is the current record number. Clicking on this number brings up a dialog that allows you jump to an arbitrary record number. This is useful when you want to quickly go to the first or last record in a group.

Total Records

This area shows you the total number of records in the database. When you are entering general data about the profiles, this number represents the number of profiles in the database. When you are entering data about pests, this represents the total number of pests in the database. When you are entering information about chemical controls, this represents the total number of active ingredients entered into the database.

Main Button

This button takes you to the Main Menu

Delete Button

This button lets you delete an entire profile, or a pest or chemical record.

Help Button

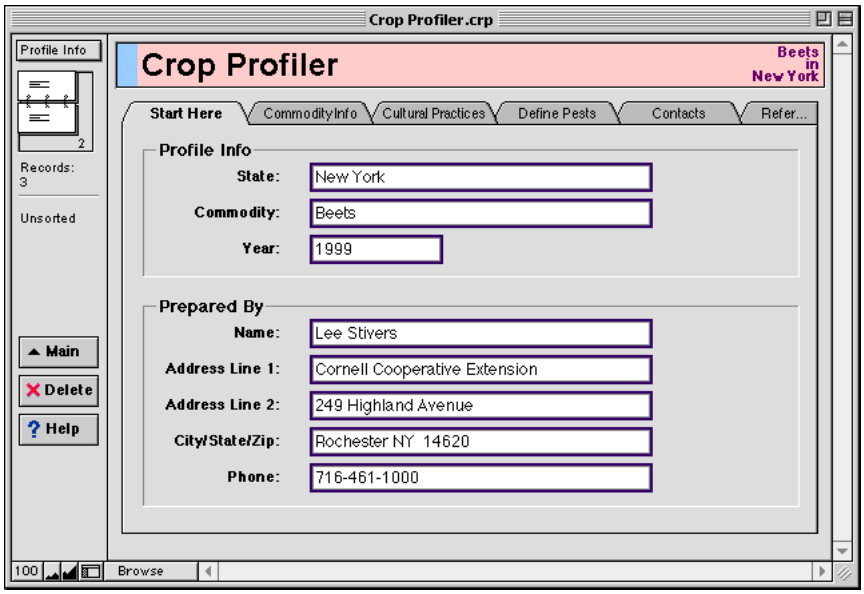
This button will initiate an email to PMEP for technical support, if your configuration supports this function. See the **Configuring Your Email Client** section of this document.

Back Button

On screens where you are entering information about pests or chemicals, the Back button takes you back to the Define Pests or Define Chemicals screens, respectively.

Data Entry Screens

Profile Info Screen



State
The state for which the profile is being prepared.

Commodity
The agricultural commodity for which the profile is being prepared.

Year
The current year is automatically entered for this field.

Preparer Name
Enter your name here.

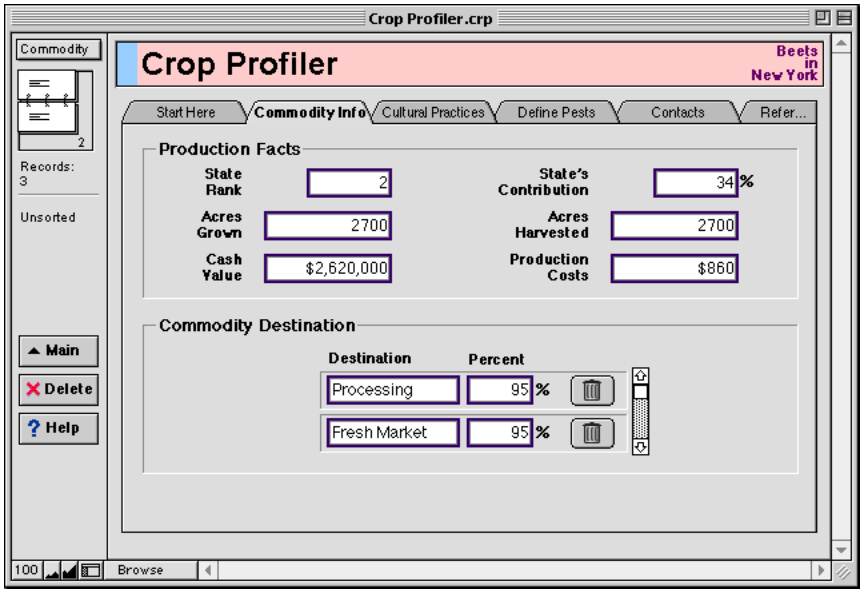
Preparer Address Line 1

Preparer Address Line 2

Preparer City/State/Zip
Your address information.

Preparer Phone
Your phone number.

Commodity Info Screen



State Rank
The national rank of the state based on total production of the commodity. This information can usually be found through the National Agricultural Statistics Service.

State's Contribution
Your state's percentage of total national production of the commodity.

Acres Grown
The number of acres of the commodity planted in your state.

Acres Harvested
The number of acres of the commodity eventually harvested in your state.

Cash Value
The dollar value of the commodity in your state.

Production Costs
The amount of money it takes to produce an acre of the commodity in your state

Commodity Destination
The commodity destination is the end-use of the agricultural commodity (fresh market, processing, etc.). Enter the destination, and the percentage of the commodity that goes toward that end-use. You can enter as many destinations as necessary. To remove a destination, click on the trash symbol.

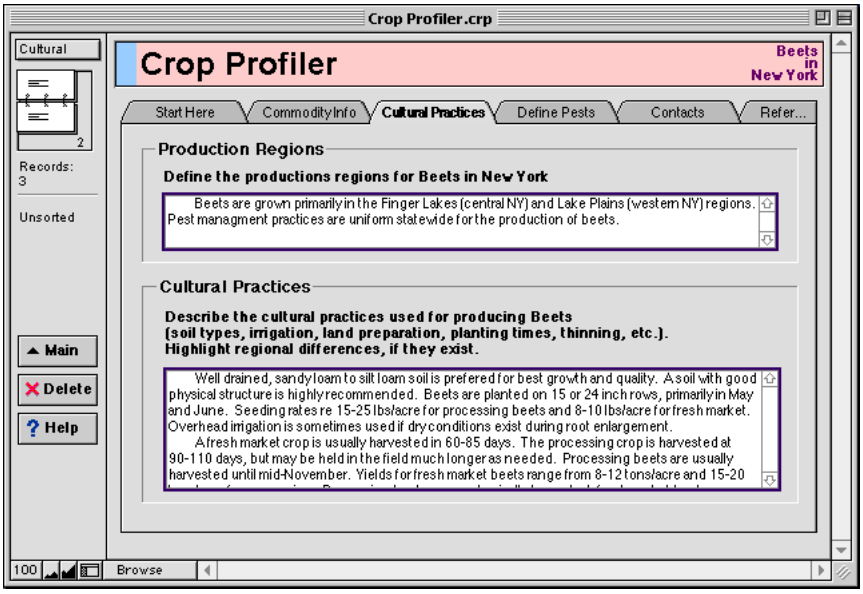
Cultural Practices

Production Regions

If the commodity is produced in distinct regions of the state, with different cultural practices, describe the geographic boundaries of those regions.

Cultural Practices

Describe the cultural practices used for producing this commodity within your state (e.g. Soil types, irrigation practices, land preparation, planting times, thinning practices, etc.). Highlight intrastate or regional differences if they exist. Feel free to type as much text into this box as necessary. You will be able to scroll through all that you have written.



Define Pests

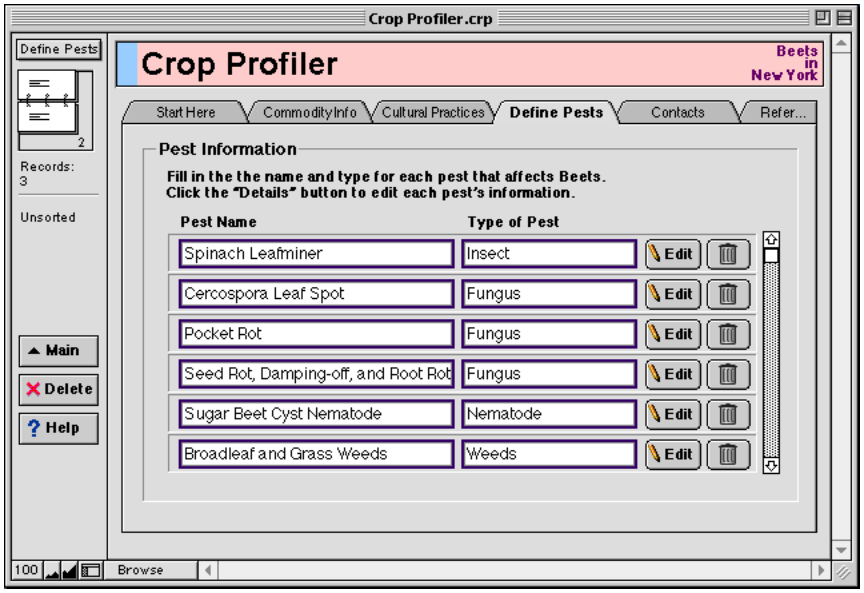
This is the screen where you list all the pests (diseases, weeds, insects, etc.) that are economically important to the commodity in your state. You can enter as many pests as you need, one per line. To enter the rest of the pest information required by a crop profile click the Edit button and you will be taken to the **Pest Info 1** screen. Click the trash can icon to remove a pest from the list. There are two fields you need to fill in for each pest:

Pest Name

For pest name you should use the common name of the pest, with the Latin name in parenthesis if clarification is necessary. It is also acceptable to group related pests into a general group (such as “broadleaf weeds”).

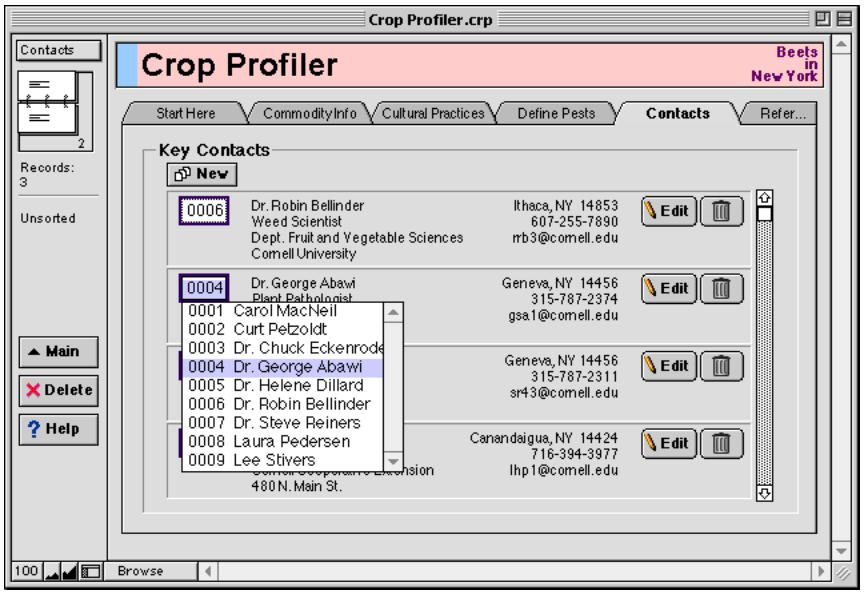
Type of Pest

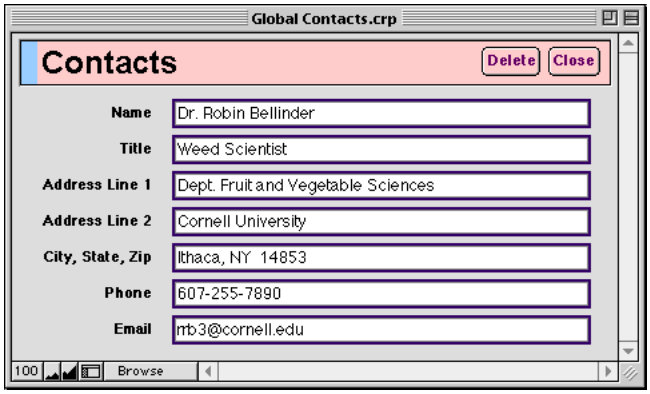
This is the general category of pest. Tabbing into this field activates a pop-up list of the most common pest types (insect, mite, fungus, bacteria, virus, nematode, weed). You can type in other types of pests as well, for example, type in vertebrate if the pest in question is meadow vole on apple.



Contacts

Use this screen to identify commodity experts within your state. You do this by picking the contact code from a drop-down list containing the contact's code and the contact's name. The names and codes in the drop-down list come from a master list of commodity experts in your state. When you first start using Crop Profiler, the master list of contacts will be empty and you will have to add to the list before you can define any contacts for a particular commodity. You add new contacts to the master list by clicking the New button which brings up the Add/Edit Contact dialog .



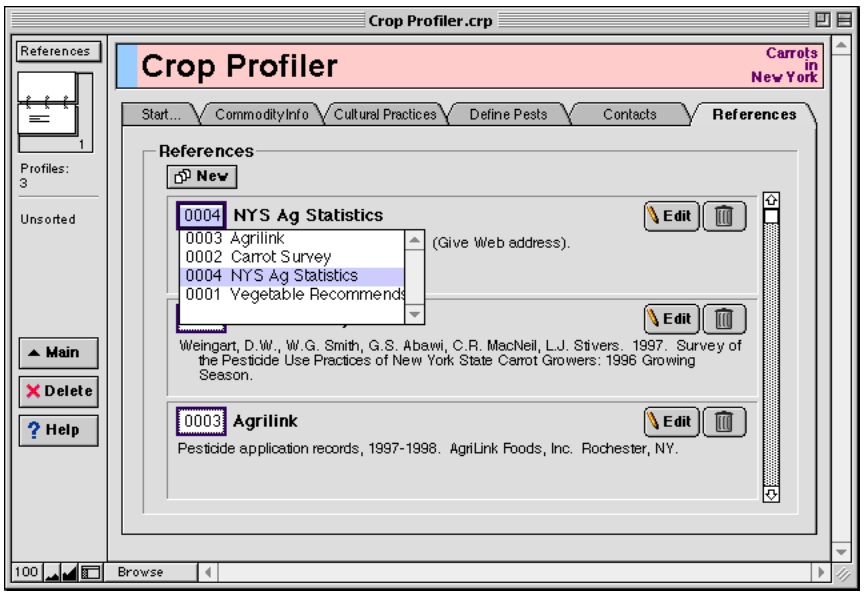


Contact Name
The contact person's name.
Contact Address Line 1
Contact Address Line 2
Contact City/State/Zip
The contact person's address information.
Contact Phone
The contact person's phone number.
Contact Email
The contact person's electronic mail address (user@host).

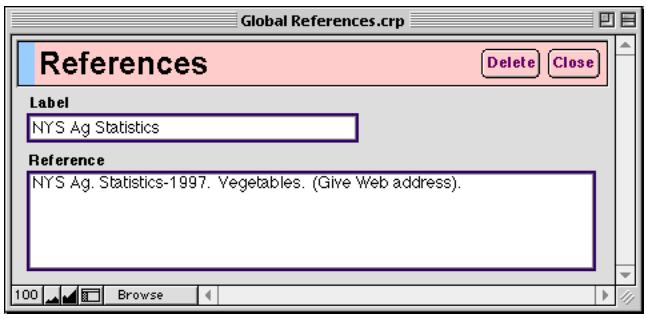
Once you've finished entering the contact person's information, click the Close button at the top of the Add/Edit Contact dialog. To continue adding contacts to the list, press the Command-N (Mac) or Control-N (Win) keys on the keyboard to create a new, blank contact record.

Once you add a contact person to the master list, you can edit the entry by clicking on the Edit button. This brings up the Add/Edit Contact dialog with the information for the currently selected contact. Edit the record, and click the Close button. The changes you make will be reflected in all the profiles you've already entered.

References



Use this screen to cite any references you used while developing the crop profile. You do this by picking the reference code from a drop-down list containing the reference code and label. The codes and labels in the drop-down list come from a master list of references. This is done because it is likely you will be relying on many of the same reference works for many of the crop profiles. When you first start using Crop Profiler, the master list of references will be empty and you will have to add to the list before you can associate a reference with a particular commodity. You add new references to the master list by clicking the New button which brings up the Add/Edit Reference dialog.



Reference Label

The reference label is for your information only. It is used to distinguish one reference from another in the drop-down list.

Reference Text

This is the full citation. Format this as if you were adding a citation to a paper. No formatting will be applied to this field, so be sure that you are giving enough information so that someone else could find the work you are citing.

Once you've finished entering the reference, click the Close button at the top of the Add/Edit Reference dialog. To continue adding references to the list, press the Command-N (Mac) or Control-N (Win) keys on the keyboard to create a new, blank citation.

Once you add a reference to the master list, you can edit the entry by clicking on the Edit button. This brings up the Add/Edit Reference dialog with the information for the currently selected reference. Edit the record, and click the Close button. The changes you make will be reflected in all of the profiles you've already entered.

Pest Info 1

Frequency of Occurrence

Enter how often the pest attacks the commodity in your state. Examples include sporadically, once every two years, every year, etc.

Damage Caused

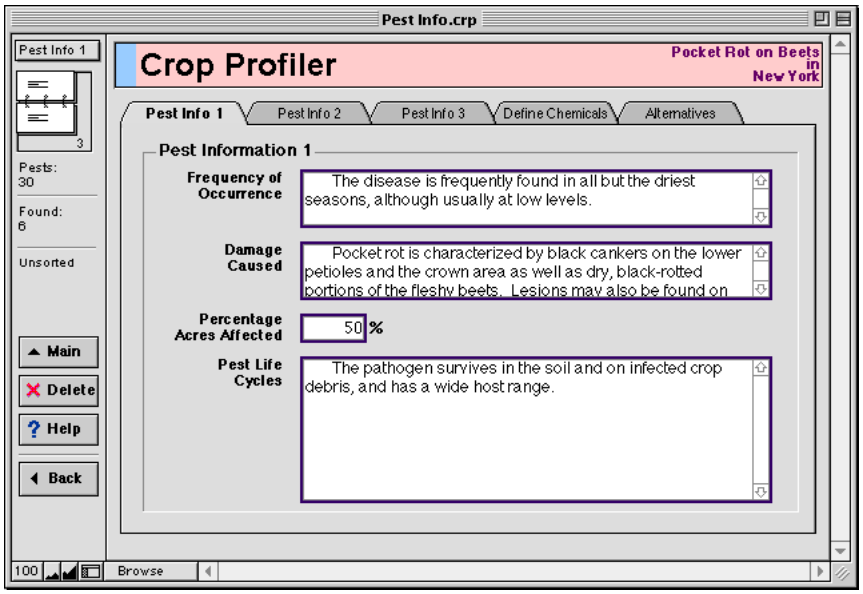
Describe the harm caused to the commodity by the presence or activities of the pest.

Percentage Acres Affected

This is the proportion of the commodity's acreage affected by a typical outbreak of the pest.

Pest Life Cycles

Describe the life cycle of the pest. Include information on reproduction, overwintering, how the pest is transmitted, alternate hosts, etc.



Pest Info 2

Critical Timing of Control Measures

If there is a period of time in the development of pest or commodity in which control measures need to be applied in order to be effective, enter that period in this field. Otherwise, leave blank.

Yield Losses

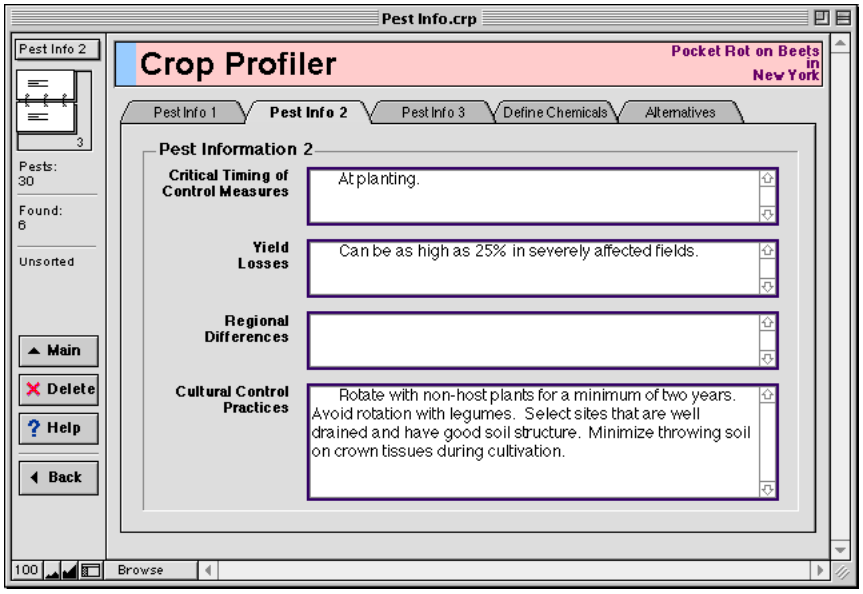
Describe the effect that the pest has on overall yield.

Regional Differences

If you defined different growing regions for the commodity in your state, describe the effect of the different regions on any aspect of the pest.

Cultural Control Practices

Describe any cultural controls that can be used to combat the pest. For example, crop rotation or sanitation.



Pest Info 3

Biological Control Practices

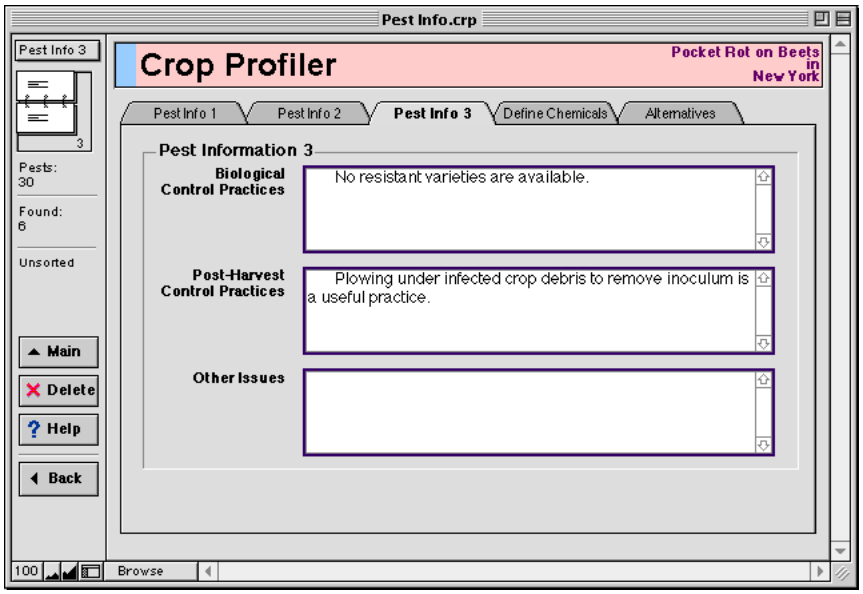
Describe any biocontrols that may be available to control the pest, for example, pheromone traps or predatory insects.

Post-Harvest Control Practices

List any measures that are used to control the pest after harvesting the commodity.

Other Issues

Enter any other information that may be relevant to the control of the pest. New research, pending pesticide cancellations, or export restrictions on the use of a pesticide are examples of the kind of information to enter in this field.



Define Chemicals

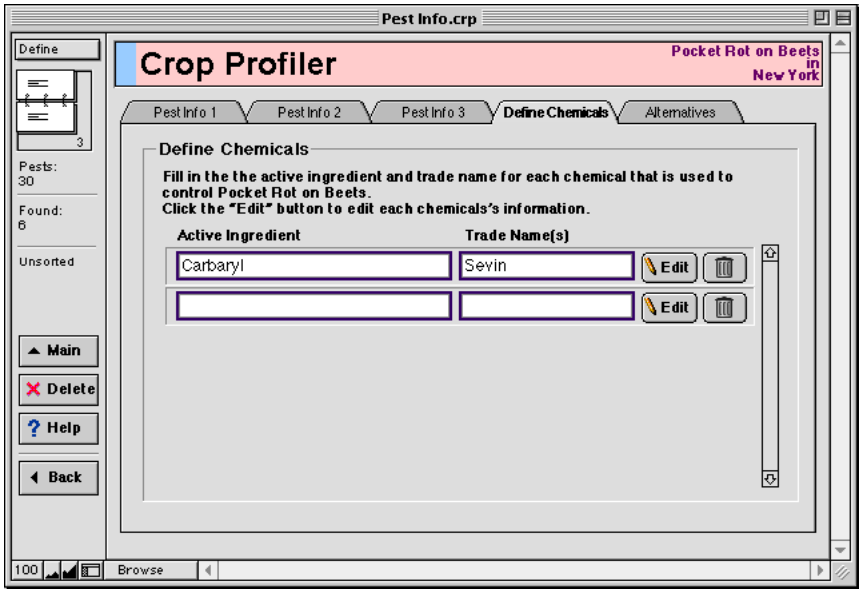
This is the screen where you list all the chemical controls that are commonly used against the pest in your state. You can enter as many chemicals as you need, one per line. To enter the rest of the chemical information required by a crop profile click the Edit button and you will be taken to the **Chemical Info 1** screen. Click the trash can icon to remove a chemical from the list. There are two fields you need to fill in for each chemical.

Active Ingredient

The chemical controls are listed by active ingredient, not pesticide product. Enter the pesticide active ingredient in this field.

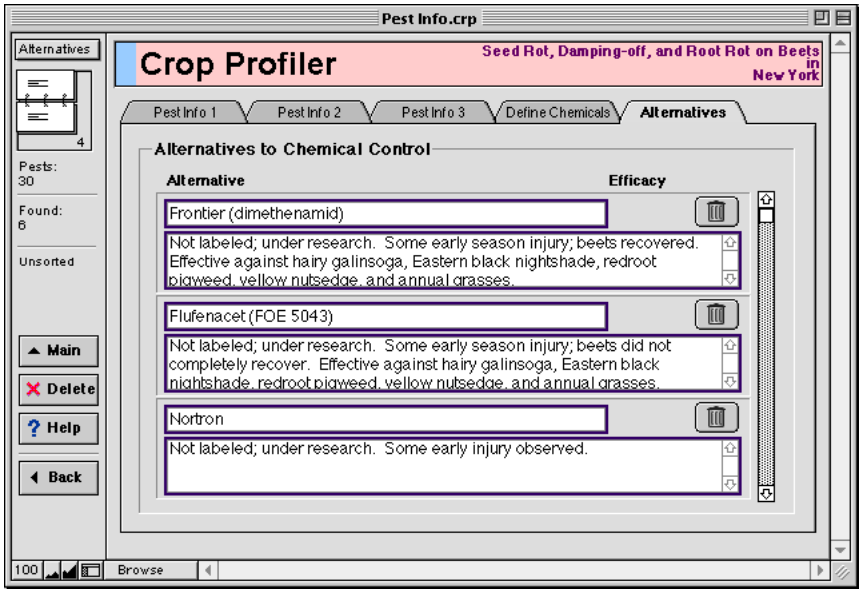
Trade Name(s)

Enter the common trade names of pesticide products that contain the active ingredient, separated by commas. For example, if the active ingredient is linuron, you might enter "Linex, Lorox" in the Trade Name(s) field.



Alternatives to Chemical Control

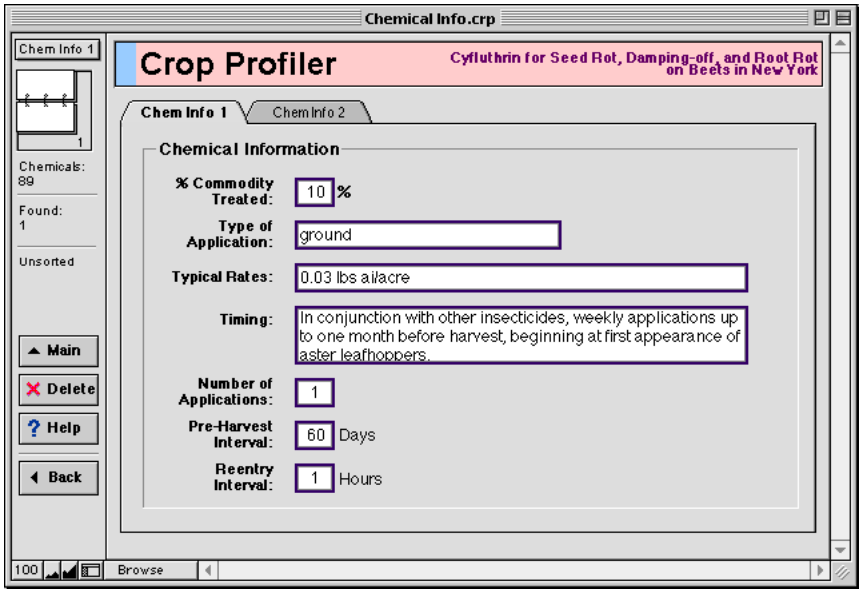
List any alternatives, both chemical and non-chemical to the chemical controls you identified in the **Define Chemicals** screen. Do not list practices already covered in the cultural and biological controls fields.



Alternative
Enter a descriptive name for the alternative.

Efficacy
Describe the overall efficacy of the control, as well as how effective the alternative control is compared to the chemical control it might replace.

Chem Info 1



% Commodity Treated
Enter the percentage of the commodity treated with the chemical.

Type of Application
Enter the type of application, for example, ground, in-furrow, foliar, banded, aerial, seed treatment, drench, etc.

Typical Rates
Enter the rates of the chemical generally used to control the pest. Be sure to include the units and specify whether it's the rate of product or the rate of active ingredient.

Timing
Describe when the chemical is usually applied. Refer to stages within the life cycle of the commodity, for example, preemergence, at planting, 5-leaf, bud, bloom, postharvest, etc.

Number of Applications
Enter the number of times the chemical is applied to the commodity in a season.

Pre-Harvest Interval
Enter the number of days you must wait after the last application of the chemical before harvesting the commodity.

Reentry Interval
Enter the number of hours you must wait after applying the chemical before workers can return to the area of application.

Chem Info 2

Use in IPM Programs

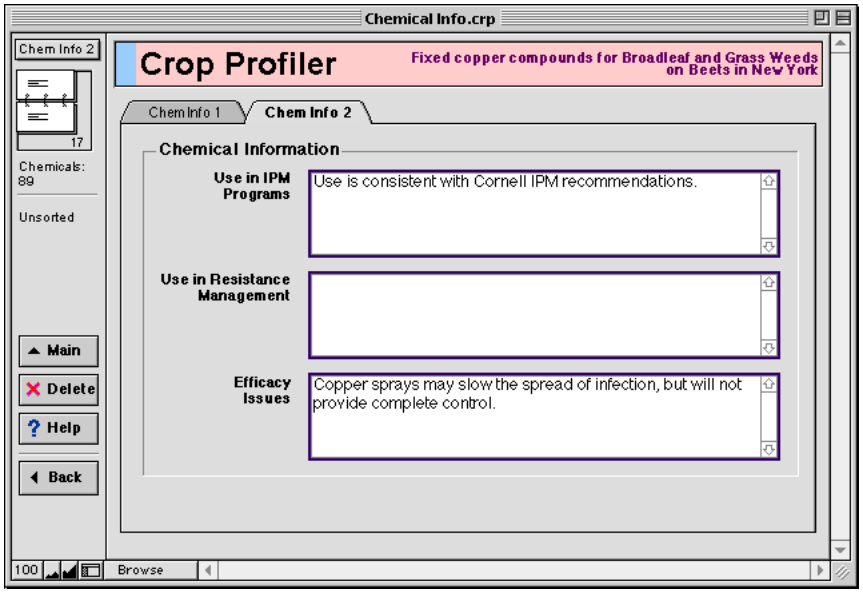
Describe any use of the chemical in an IPM program. For example, if the chemical is less toxic to predatory mites than other registered alternatives.

Use in Resistance Management

Describe any use of the chemical in a resistance management program.

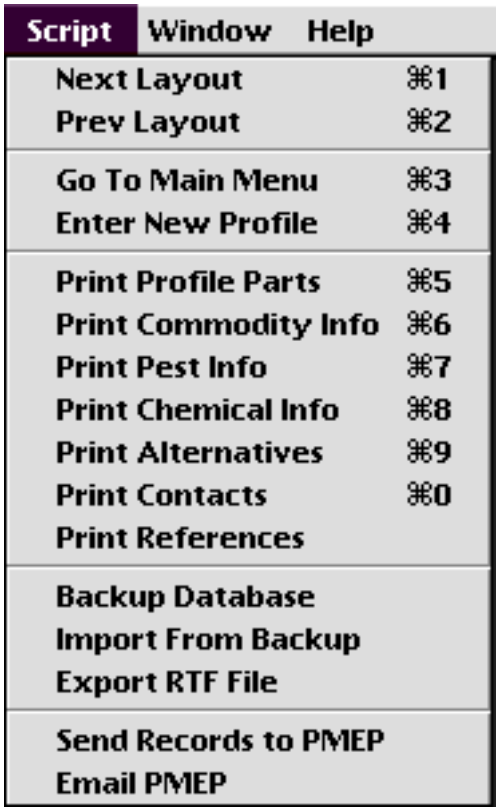
Efficacy Issues

Describe any efficacy issues that affect the chemical. For example, the chemical may be ineffective on some types of soil or under some weather conditions. Or it simply may not be as effective as another registered alternative.



The Scripts Menu

The Scripts menu is accessed through the application menu bar. It contains, navigation, printing, export, and utility commands. The **Main Menu** screen should be displayed before using these commands, because most of the commands operate on the crop profile that is currently selected in the Main Menu.



Next Layout
This command takes you to the next screen (the same as clicking on a tab).

Prev Layout
This command takes you to the previous screen (the same as clicking on a tab).

Go to Main Menu
This command takes you directly to the Main menu from any screen.

Print Profile Parts
This command sends every section of the currently selected profile in the Main Menu to the printer. You will be able to preview each part before it prints. You will also be able to cancel the printing of each part. Printing an entire profile is not generally recommended because it uses a lot of paper. Try printing individual parts instead.

Print Commodity Info
This command prints a report containing the general commodity information you filled in regarding the currently selected profile in the Main Menu.

Print Pest Info
This command prints a report detailing the pests and pest information for the currently selected profile in the Main Menu. This report is sorted by the type of pest.

Print Chemical Info
This command prints a report detailing the chemicals and chemical information for the currently selected profile in the Main Menu. This report is sorted by the target pest.

Print Alternatives
This command prints a report detailing the alternatives (both chemical and non-chemical) to the chemicals you've specified for the currently selected profile in the Main Menu.

Print Contacts
This command prints a report of the key contacts you've defined for the currently selected profile in the Main Menu.

Print References
This command prints a report of the references you've defined for the currently selected profile in the Main Menu.

Backup Database
This command exports the information you've entered into the Crop profiler database in tab-delimited text format to a folder called "Exported Data" inside the Crop Profiler folder. This serves as a backup of your data in case of an emergency. You should run this command every time you enter a significant amount of data into the database, and before you upgrade to a newer version of the Crop Profiler database. In addition, it is a good idea to copy the "Exported Data" folder to diskette or other external media, if possible.

Import From Backup

This command should only be used in the case of an emergency, and only if you have recently backed-up your data. It will delete all the records in the database, and import the records from your last backup. You will be warned of what you are about to do, and you will have a chance to cancel. DO NOT USE THIS COMMAND UNLESS YOU ARE ABSOLUTELY SURE OF WHAT YOU ARE DOING!

Export RTF File

This command exports the information entered in the currently selected profile as a Rich Text Format (RTF) file. Rich Text Format files can be read by nearly any word processing program, like Microsoft Word and Corel WordPerfect, among others. The exported file is called "Profile.rtf" and it is saved inside the Crop Profiler folder. You should open this file in your word processing program, and save it to a new location because the "Profiles.rtf" file will be overwritten the next time you run this command. You should run this command when you are finished entering information for a crop profile. Edit the word processing document to create your finished crop profile report.

Send Records to PMEP

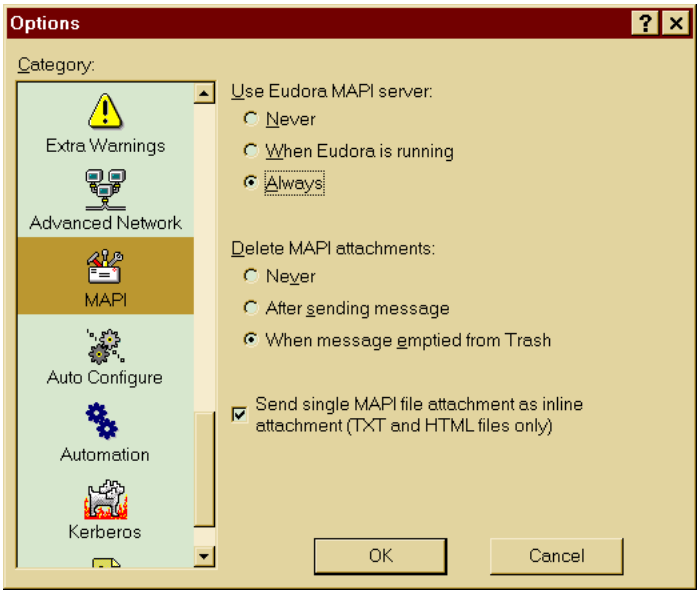
This command will attempt to email the contents of the "Exported Data" folder to PMEP. We are trying to gather an archive of all the crop profiles people create using the Crop Profiler application. For this to work, you must be connected to the internet (through a dialup or ethernet connection) and you must be running a compatible email client, such as Eudora or Outlook. In addition, on Windows your email client must be selected as your default MAPI client. If this command works as expected, a number of email messages will be created by your email client, addressed to PMEP, each with a file attached. See the **Configuring Your Email Client** section of this document.

Email PMEP

This command will initiate an email message to PMEP. Use this if you have a question or comment regarding Crop Profiler. See the **Configuring Your Email Client** section of this document.

Configuring Your Email Client

Your email client must be configured correctly in order for the Crop Profiler application to send email to PMEP. If you are using a Macintosh, you must specify your email client using the Internet Config application, or the Internet control panel in MacOS 8.5 and above (in most cases this setting is already correct). If you are using a Windows computer, you must specify your email client as the Windows messaging (MAPI) client. If you are using Eudora Pro, go to the "Tools" menu and select the last item, "Options". Select "MAPI" from the left-hand icon list. Under "Use Eudora MAPI Server" check the "Always" box, as shown below:



When the Profile Is Completed

Please send the edited word-processor document to PMEP, and we will forward it to the Office of Pest Management Policy at USDA. You can attach it via email to PMEP_Webmaster@cornell.edu. We prefer Microsoft Word format, but we can convert just about any other word-processing format. We will also post the profile on our website: http://pmep.cce.cornell.edu/fqpa/.

Technical Support

If you encounter a problem, contact PMEP at:

Phone: (607) 255-8410
or
Email: PMEP_Webmaster@cornell.edu

It would be helpful to note any error messages you may have encountered.