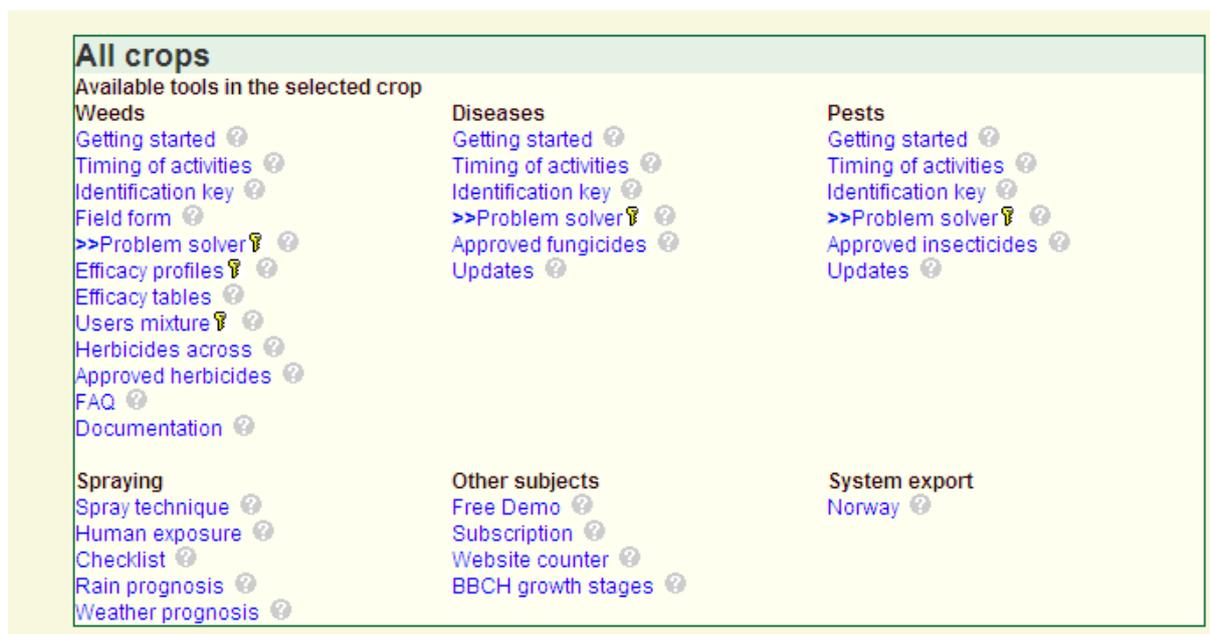


# Getting started with Crop Protection Online

How do get and easy start using CPO?

A screen-shot of the **Main menu** of CPO is shown just below. The tool named **>>Problem solver** is probably the most useful tool for the main target group of end-users, which is farmers. Based on a field report, this tool can quantify needs for control and suggest alternative treatments options.



The **Main menu** presently includes 30 crops for Danish conditions. All the listed tools are, however, not yet developed to all these crops. For example, tools for pests and diseases is only developed for cereal crops. When the user select a crop, the menu will show tools available for this crop.

**Key**-ikons mark tool, which only can be used by login (subscription). Under 'Free demo', however, tools can be tested but with a restricted, agronomic content.

Click **?**-ikons if you want additional explanation of a specific tool or menu point.

**Timing of activities** show when and how different weeds, pests and diseases in different crops should be properly monitored during a full growing season.

**Identification keys** include illustrations and colour pictures of weeds, pests and diseases on different stages of development. These tools may assist identification of species, which have been found in field inspections.

Field form is a 1-page printable form, which may be brought in the field to be sure that the field inspections are conducted in the right way.

**Approved herbi-, fungi- and insecticides** show approved and marketed assortments of trade products. Label information is included.

## Special tools for weed control

**Efficacy profile and Users mixture** show, how effectively different weed species are controlled by a single herbicide or by a 'tank-mixture' of 2-4 herbicides, which the user selects, so these tools can provide overviews of strengths and weaknesses of such treatments.

Herbicides across has been designed to use in situations, where the Problem solver tool cannot find treatment options. Such situations may occur, if the user selects a crop or a crop BBCH stage, where only a few weed species may be controlled. Herbicides across show treatment options:

- In a selected crop
- For a selected weed
- For a selected herbicide

## How can CPO make a difference?

CPO is a product of Danish pesticide action plans since 1986. CPO has been designed to assist primarily farmers to control weeds, pests and diseases with a minimum input of pesticides.

This objective is followed by combining knowledge on interactions between crops, pest and control options with current information on a field level. Compared to alternative methods of decision making in crop protection CPO aims for a systematic exploitation that weeds, pests and diseases:

- are not uniformly distributed in time and space
- have different importance in different crops
- have different susceptibility to different pesticides under different conditions

A fundamental principle is that CPO only recommends application of pesticides when actual conditions on a field level motivates this. CPO can assist:

- to provide overviews of tasks in crop protection during a full growing season
- to identify all important weeds, pests and diseases
- to quantify needs for control on a field level
- to recommend treatments that are targeted for conditions on a field level with a minimized input of pesticides
- to provide overviews of pesticides' strengths and weaknesses in terms of efficacy

More than 2,000 field tests of the recommendations from CPO in Denmark show that the recommendations are robust and that the use of herbicides in particular, can be reduced significantly. CPO also offer a always updated and central point of reference regarding thresholds and pesticide efficacy.

## What are the requirements to farmers?

Field inspections are required to exploit the potential of CPO. As advisors are too few to overcome this, farmers are the main target group of CPO.

A questionnaire survey among 600 Danish farmers in 2006 revealed that Danish farmers have great confidence in recommendations made by CPO, but the requirement for making field inspections is a major obstacle for a wider use. Presently, about 1,000 Danish farmers subscribe to CPO (3-4%).