

## **EXTRAPOLATION TABLE for EFFECTIVENESS of FUNGICIDES**

### **► DISEASES ON UMBELLIFEROUS CROPS**

#### **INTRODUCTION**

The table provides detailed lists of acceptable extrapolations organized by crop groups, for regulatory authorities and applicants, in the context of the registration of plant protection products for minor uses. The table should be used in conjunction with the EPPO Standard PP1/257(1) - *Efficacy and crop safety extrapolations for minor uses*. It is important to ensure that expert judgment and regulatory experience are employed when using these tables. EPPO excludes liability as to the reliability of the information provided through these tables.

The scope for extrapolation may be extended as data and experience with a certain plant protection products increases. The applicant should always provide appropriate justification and information to support the proposed extrapolation. For example, comparability of target biology may be a relevant factor, either in extrapolating to other target species or for the same target onto another crop. For crops, factors such as comparable growth habit, structure etc. should be considered.

#### **TABLE FORMAT**

The main pest species for the crop group are listed in Column 1 (although this is not exhaustive), and the pest group to which they belong is specified in Column 2. Companies may choose if they wish to provide data only for individual named species, which would then appear individually listed on the label. But underlined species have been identified as key major targets and as such it is advisable to generate data on these. Furthermore, data on these species then allow a claim to be made for the whole pest group (as specified in Column 2), if required. If a claim for the whole pest group is required but there is no underlined species, then data must be generated on all listed species.

Column 3 indicates the key indicator crop(s) for the crop group. In some instances this may be only one specified crop. In other cases, when separated by an 'or', the company may choose from a range of alternatives within the group. Data generated on crops in Column 3 may be used to extrapolate to all crops listed in Column 4. However, it is preferable to have data on several of the crops within the crop group, but data on the indicator crop should be available.

Column 5 identifies whether data on other crops against the same target may help to reduce the amount of required data on the indicator crop. It may be possible for a direct extrapolation without the need for further data on the indicator crop (marked with an asterisk (\*)). However, this is dependent on the extent of available data and similarity of crop/target biology. The company should provide an appropriate reasoned case when wanting to use supporting data from other crop groups.

Column 6 gives examples of acceptable extrapolations for a particular pest claim onto other minor use crops. This is not a comprehensive list. Whether extrapolation may be direct (no data, marked with an asterisk (\*)), or require additional supporting data on the minor use crop, will again be dependent on the extent and relevance of the existing database and companies should provide an appropriate reasoned case. If the crop is considered to be a major crop in some countries then it may not be appropriate to include in this column, and further data would be required. Companies will need to justify the status of the major crop/minor use.

## EXTRAPOLATION TABLE for EFFECTIVENESS of FUNGICIDES

### ► DISEASES ON UMBELLIFEROUS CROPS:

DAUCA Carrot *Daucus carota*, APUGV Celery *Apium graveolens* and APUGR Celeriac *Apium graveolens* var. *rapaceum*, FOEVD Fennel *Foeniculum vulgare* var. *dulce*, PAVSA Parsnip *Pastinaca sativa*, PARCR Parsley *Petroselinum crispum*, CORSA Coriander *Coriandrum sativum*, CRYCA Caraway *Caraway*

Pests		Crops: within the Umbelliferae		Crops: outside the Umbelliferae	
1 Pathogen species species	2 Pest group name	3 Indicator crops	4 Extrapolation to other crops	5 Data from these crops can support the indicator crops (reduced data or no data *)	6 Extrapolation to crops (reduced or no data*)
<i>Alternaria dauci</i> ALTEDA; <i>Alternaria radicina</i> ALTERA <i>Alternaria</i> sp. ALTESP	Leaf spot	Carrot DAUCA	To all umbelliferous	Host crops of <i>Alternaria</i> sp	Herbs Salsify TROPS Crops for seed production
<i>Cercospora carotae</i> , CERCCA					
<i>Pythium</i> sp PYTHSP	Cavity spot	Any umbelliferous	To all umbelliferous		
<i>Stemphylium</i> sp. STEMSP	Stemphyliose	Fennel FOESS	Carrot DAUSS, Celeriac APUGR	Asparagus ASPSS	
<i>Helicobasidium brebissonii</i> , HLCBBR	Violet root rot	Carrot DAUCA	To all umbelliferous		
<i>Rhizoctonia carotae</i> , RHIZCA	Storage disease	Any umbelliferous	To all umbelliferous		
<i>Erysiphe heraclei</i> , ERYSH	Powdery mildew	Any umbelliferous	To all umbelliferous	Cucumber CUMSA	Black salsify SCVHI Herbs
<i>Mycocentrospora acerina</i> , MYCCAC		Carrot DAUCA	To all umbelliferous		

<i>Phytophthora</i> sp. PHYTSP	Ring rot	Any umbelliferous	To all umbelliferous		
<i>Phoma</i> sp. PHOMSP		Any umbelliferous	To all umbelliferous	Leafy vegetables	
<i>Plasmopara crustosa</i> <i>umbrelliferarum</i> PLASCR, <i>Peronospora</i> sp. PEROSP	Downy Mildew	Fennel FOESS Parsley PARCR	To all umbelliferous		
<i>Septoria</i> sp SEPTSP	Septoria disease	Any umbelliferous (except carrot DAUCA)	To all umbelliferous		
<b>The following extrapolation possibilities are proposed to be addressed in tables covering generic pests</b>					
<i>Pythium violae</i> , PYTHVI		Carrot DAUCA	Fennel FOESS, Celeriac APUGR	Any other crop*	
<i>Botryotinia fuckeliana</i> , BOTRCI		Celeriac APUGR	Fennel FOESS, Celeriac APUGR	Any other crop*	
<i>Pythium</i> PYTHSP, <i>Rhizoctonia</i> RHIZSP, <i>Phytophthora</i> PHYTSP, <i>Fusarium</i> FUSASP	Damping-off diseases	Carrot DAUCA		Spinach SPQOL, Sugarbeet BEAVA	Herbs
<i>Sclerotinia sclerotiorum</i> , SCLESC		Carrot DAUCA	Fennel FOESS, Celeriac APUGR Parsley PARSS		
<i>Thanatephorus cucumeris</i> , RHIZSO		Carrot DAUCA		Lettuce LACSA, Brassica 1BRSG	
<i>Streptomyces scabiei</i> , STRESC	Bacterium disease	Carrot DAUCA		Potato SOLTU	
<i>Xanthomonas hortorum</i> pv. <i>Carotae</i> , XANTCR	Bacterium disease	Carrot DAUCA	Fennel FOESS, Celeriac APUGR		