**EXTRAPOLATION TABLE for EFFECTIVENESS of FUNGICIDES AND BACTERICIDES
DISEASES ON NUT TREES**

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 AND BACTERICIDES
► DISEASES ON NUT TREES
PRNDU sweet almond *Prunus dulcis,* CYLAV hazelnut *Corylus avellana,* IUGRE walnut *Juglans regia,* CSNSA sweet chestnut *Castanea sativa,* PIAVE pistachio *Pistacia vera*

Pests		Crops: within the tree nuts		Crops: outside the tree nuts	
1 Pathogen species	2 Disease 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*)
Gloeosporium amygdalinum (= *Glomerella cingulata*) GLOMCI	Anthracnose	Common walnut IUGRE	Sweet almond PRNDU, pistachio PIAVE	Apple MABSS, Pear PYUSS, Sweet cherry PRNAV	Cherry laurel PRNLR, Rosebay NEROL, Apple MABSS
Gnomonia leptostyla GNOMLE		Common walnut IUGRE			Heart Cherry PRNAJ
Sphaceloma coryli SPHASP		Common walnut IUGRE	Common hazel CYLAV		
Monilinia fructicola MONIFC	Brown rot of stone fruits	Sweet almond PRNDU		Plum PRNDO, Pear PYUSS, Apple MABSS, Peach PRNPS, Nectarine	Apricot PRNAR, Heart Cherry PRNAJ, Quince CYDOB, Medlar
Monilinia fructigena MONIFG		Almond	Common hazel CYLAV		

Monilia laxa MONILA		Sweet almond PRNDU		PRNPN, Apricot PRNAR, Sweet Cherry PRNAV, Sour Cherry PRNCE	MSPSS
Cryphonectria parasitica ENDOPA	Canker of chestnut	Sweet chestnut CSNSA			Oak QUESS, Eucalyptus EUCSS, Clove SYZAR
Cytospora cincta (=*Valsa cincta*) VALSCI	Dieback of fruit trees	Sweet almond PRNDU		Peach PRNPS	Apricot PRNAR, Blackcurrant RIBNI, Redcurrant RIBRU
Cytospora leucostoma (=*Valsa leucostoma*) VALSLE					
Gloeosporium coryli (=*Neofabraea malicorticis, Cryptosporiopsis* sp.) PEZIMA	Gloeosporium	Common hazel CYLAV		Apple MABSS, Pear PYUSS	
Wilsonomyces carpophilus (=*Coryneum beijerinckii*) STIGCA	Shot-hole spot of stonefruit	Sweet almond PRNDU		Peach PRNPS, Plum PRNDO	Apricot PRNAR, Heart cherry PRNAJ, cypress CVBSS, Rose ROSSS
Phoma endogena PHOMPO	Shot-hole spot	Sweet chestnut CSNSA		Beta beet BEAVX, Rape BRSNN, Sunflower HELSS, Cabbage BRSOX, Potato SOLTU	Citrus 1CIDG, Rose ROSSS
Taphrina deformans TAPHDE	Leaf curl of peach	Sweet almond PRNDU		Peach PRNPS, Nectarine, Pear PYUSS, Plum PRNDO	Heart cherry PRNAJ,
Mycosphaerella punctiformis (=*Mycosphaerella maculiformis* , *Septoria castanicola*) MYCOMC	Leaf spot of chestnut	Sweet chestnut CSNSA		Apple MABSS, pear PYUSS, Cereals YCERE, Cabbage BRSOX, Cucumber CUMSC, Melon CUMME	
Phyllactinia guttata (=*Phyllactinis suffulta*) PHYLGU	Powdery mildew of hazel	Common hazel CYLAV		Apple MABSS	
Tranzschelia pruni-spinosae TRANPS	Red rust of stone fruit	Sweet almond PRNDU		Plum PRNDO, Peach PRNPS	Apricot PRNAR,

Rhacodiella sp. RHCDSP	Rhacodiella	Sweet chestnut CSNSA			
Venturia carpophila VENTCA	Scab of plum	Sweet almond PRNDU		Apple MABSS, Pear, Peach PRNPS, Plum PRNDO Apricot PRNAR,	Heart cherry PRNAJ, Peach PRNPS
Fusicoccum amygdali FUSCAM	Twig canker of peach	Sweet almond PRNDU		Peach PRNPS	
Chondrostereum purpureum STERPU ("silver blight"), *Phomopsis amygdali* FUSCAM*, Eutypa lata* EUTYLA	Cankers	Sweet almond PRNDU, Common walnut IUGRE, Hazelnut CYLAV		Apricot PRNAR	Plum, Peach PRNPS, Apricot PRNAR, Ribes sp
The following extrapolation possibilities are proposed to be addressed in tables covering generic pests					
Botrytis cinerea BOTRCI	Grey mould	Common hazel CYLAV		Strawberry FRASS, apple MABSS, pear PYUSS, sunflower HELSS, pea PIBSS, vegetable plants NNNVV: leek ALLPO, tomato LYPES, cabbage BRSOX, cucumber CUMSC, garden bean PHSVX, melon CUMME, lettuce LACSS, onion ALLSS, grapevine 1VITG	Kiwi plant ATICH, heart cherry PRNAJ, fig FIUSS, hop HUMLU, rose ROSSS
Phytophthora cactorum PHYTCC	Ink disease	Common walnut IUGSS	Sweet chestnut CSNSA	Apple MABSS, pear PYUSS, tomato LYPES, potato SOLTU, garden carrot DAUCS, strawberry FRASS, peach ALLPO, sweet orange CIDSI, lemon CIDLI	Apricot PRNAR, heart cherry PRNAJ, citrus 1CIDG, pineapple ANHCO, hop HUMLU, avocado PEBAM
Chalaropsis thielavioides CHALTH	Root rot of walnut	Common walnut IUGRE			Elm ULMSS, rose ROSSS

Verticillium dahliae VERTDA	Verticillium wilt	Sweet almond PRNDU	Pistachio PIAVE	peach PRNPS, strawberry FRASS, olive OLVEU, prunus, ornamentals	Heart cherry PRNAJ, apricot PRNAR,
Xanthomonas campestris pv. Corylina XANTCY	Bacterial blight	Common walnut IUGRE	Common hazel CYLAV	Garden bean PHSVX, strawberry FRASS, tomato LYPES, cabbage BRSOX, garden carrot DAUCS	
Xanthomonas campestris pv. juglandis XANTJU		Common walnut IUGRE			
Pseudomonas syringae pv avellanae PSDMSY	Bacterial canker	Sweet almond PRNDU		Peach PRNPS, pear PYUSS, apple MABSS, plum PRNDO, tomato LYPES, melon CUMME, garden bean PHSVX, cabbage BRSOX	Apricot PRNAR, heart cherry PRNAJ, olive OLVSS, citrus 1CIDG, kiwi plant ATICH