Table 4. Herbicides for use in nursery crops, with remarks on application timing and restrictions on use			
Herbicide trade name	Active ingredient	Remarks	
Before planting			
Rival EC Bonanza 400 L Bonanza 480 L Treflan E.C.	trifluralin	Apply in spring before transplanting shelterbelts. Incorporate according to label directions. Do not apply if soil is crusted, lumpy or too wet for good mixing action.	
New plantings or establish	ed stock – pre-emergen	ce to weeds	
Treflan Granular	trifluralin	May be used on established field or container stock or on woody ornamental beds. Apply early in the spring. Smooth soil surface should be present to ensure even distribution. Irrigation or precipitation should follow application.	
Linuron 400 L Lorox L Lorox DF	linuron	Shelterbelt plants must be established at least 1 year. Make only a single application. Apply before buds open in the spring and before weeds are 10 cm high. Do not use on sandy soils.	
Devrinol 10G Devrinol 50DF Devrinol 2G	napropamide	Use on a range of field-grown and container nursery stock. Use only on transplanted or established stock. Apply as a band or broadcast depending on plant size. Adequate moisture is necessary for good weed control. Mechanical incorporation may be necessary. Does not control emerged weeds or perennials.	
Simadex Simazine Princep Nine-T Simazine 480	simazine	Use only on nursery stock or shelterbelts established 1 year or more. Apply in fall or spring. Rainfall is required to move chemical into root zone. Apply before buds break in the spring. Do not apply to trees grown on saline soils. Adjust rate based on soil type.	
Ronstar 2G	oxadiazon	For use on ornamentals grown in containers only. Ensure uniform distribution in the container. Rainfall or overhead irrigation will improve control activity. Do not apply to wet foliage or when granules will collect on leaves. Suggestion: For a more uniform application, apply half the product in one direction and the other half in the opposite direction.	
Casoron G-4 Casoron G-2	dichlobenil	Established planting only. Apply when temperature is less than 15°C. Water is required to move chemical into the soil. Apply in early spring or fall. Use high rate every other year or low rate every year. Do not use on plants that die down to ground in fall, and use with caution on shallow-rooted ground covers. Can be used for some container-grown species; must be watered in after application. Consult label for directions for use on fruit tree nursery applications.	
Dacthal W-75	chlorthal	Apply at lining out, late fall or early spring. Apply to recently cultivated, uniform texture soil. Can be applied immediately after lining out stock. For established plantings, apply after cultivation to remove existing weeds. Apply in early spring. Can also be applied in late summer, if following cultivation.	

(continued)

Table 4. (continued)			
Herbicide trade name	Active ingredient	Remarks	
Post-emergence – after weed emergence, directed spray only			
Glyphosate Products	glyphosate	Different formulations and concentrations are available. Rate depends on the weeds to be controlled. Glyphosate products are non-selective and must be applied as a carefully directed spray to avoid contact with tree or shrub foliage and immature bark.	
Amitrol 240 L	amitrol	Established shelterbelts only. Spray carefully to avoid contact with trunks or foliage of shelterbelt plants. Restricted application on spruce nursery barefoot stock. Consult product label for detailed application instructions.	
Gramoxone	paraquat	Established shelterbelts/nurseries only. Apply carefully to avoid contact with green foliage or other green plant parts. Adjust rate based on size of weeds. Directed spray only.	
Poast Ultra	sethoxydim	Treat annual grasses when at 1 - 6 leaf stage or quackgrass when actively growing, up to 3 leaf stage (8-12 cm high). Merge surfactant must be added.	
Venture L	fluazifop-p-butyl	Rate depends on grass species to be controlled. Can be used in either newly planted or established ornamental plantings. Treat annual grasses at 2 - 5 leaf stage (green/yellow foxtail at 2-4 leaf stage). Quackgrass should have 3 - 5 fully developed leaves. Check label for more details. Over the top applications are acceptable for most plant species; however directed sprays are recommended for some species.	
Kerb 50 WSP	propyzamide	Use on plants that are established 1 year or more. Apply in the fall when soil temperatures are low but not frozen. Kerb is taken up by weeds in the spring. Product starts to break down in warm soils. Do not allow treated areas to drain onto turf grasses.	
EcoClear	acetic acid	Best results with spring and early summer applications to actively growing weeds. Contact, non-selective. Adequate coverage necessary for control. Rainfall within one hour of application will reduce degree of control. Avoid contact with desirable plants.	