

**Overview of containment measures for
genetically modified plants**
Status October 2023 (CGM/231009-01)

Overview of containment measures for genetically modified plants

COGEM advice CGM/231009-01

Dutch Regulations on Genetically Modified plants under contained use

When activities are carried out with genetically modified (GM) plants under contained use, dispersion of introduced sequences in the environment must be prevented. A number of general containment measures have been drawn up for this purpose which are laid down in Appendix 9 of the Dutch GMO regulation.¹ The area in which work is done with the GM plants, for example, must meet certain conditions and any waste which may contain plant reproductive parts has to be inactivated. Based on the characteristics of a plant species additional containment measures can be imposed to prevent the distribution of the introduced sequences. This means checking whether the species is present in the Netherlands, or if it could establish itself here. It must also be considered whether related species are present in the Netherlands that the species could hybridize with. If this is the case, additional measures will often be necessary to prevent the dispersal of the introduced sequences through seed, pollen or plant reproductive parts. In determining the necessary containment measures it is assumed that the activities are conducted with plants which have been modified with sequences that do not encode gene products with potential harmful effects. For plants which have been modified with sequences which do encode potentially harmful gene products, a case-by-case assessment will have to be made to determine whether or not additional containment measures are necessary.

Periodic overview of GM plant species and corresponding containment measures

The Netherlands Commission on Genetic Modification (COGEM) advises the Dutch government (amongst others) on the containment measures for GM plants under contained use. These advisory reports are written in Dutch and are therefore only published on the Dutch part of the COGEM website. COGEM periodically revises its overview list by adding new plant species and the corresponding containment measures. In order to inform other countries and/or organisations about the containment measures advised by COGEM, the most recent overview list has been translated. The current update includes plant species from COGEM advices between October 2021 and October 2023.

Table 1a contains a list of additional containment measures required for activities involving GM seed plants (Spermatophyta) under 'contained use', which are arranged taxonomically by family name. In table 1b, the list is sorted alphabetically by species name. Table 2 contains a list of containment measures for plants which reproduce by means of spores, such as mosses and ferns (informally known as Cryptogamae). Micro-algae, such as green algae (Chlorophyta), can be found in another list.²

1. Ministerie van Infrastructuur en Milieu. Regeling genetisch gemodificeerde organismen milieubeheer 2013.

<https://wetten.overheid.nl/BWBR0035072/2023-04-01> [in Dutch]

2. Risk Classification of Organisms: Overview of apathogenic organisms other than viruses, bacteria, fungi or parasites, classified by COGEM. COGEM advice CGM/211228-02

Table 1a. Additional containment measures required for activities involving GM seed plants (Spermatophyta) under ‘contained use’ – taxonomic arrangement.

Seed plants (Spermatophyta)		Characteristics		Physical containment measures required			
Family	Species/Genus	Pollination ¹	Presence in the Netherlands ²	Prevent wind pollination	Prevent insect pollination	Additional measures necessary for seeds and/or soil	Reason for additional containment measure for seeds and/or soil
Amaranthaceae	<i>Beta vulgaris</i>	<i>W/I</i>	<i>W</i>	+	+	No	
	<i>Chenopodium quinoa</i>	<i>SP/I/W</i>	<i>W</i>	+	+	Yes	Small seeds.
	<i>Gomphrena clausenii</i>	<i>I</i>	-	-	-	No	
	<i>Gomphrena elegans</i>	<i>I</i>	-	-	-	No	
	<i>Spinacia oleracea</i>	<i>W</i>	<i>W</i>	+	+	No	
Amaryllidaceae	<i>Allium ampeloprasum</i> (syn. <i>Allium porrum</i>)	<i>I</i>	<i>W</i>	-	+	Yes	Wind dispersal: seeds are 'ejected'.
	<i>Allium cepa</i>	<i>I</i>	<i>W</i>	-	+	Yes	Wind dispersal: seeds are 'ejected'.
	<i>Allium sativum</i>	<i>I</i>	<i>C</i> (sterile)	-	-	No	
Apiaceae	<i>Anthriscus sylvestris</i>	<i>I</i>	<i>W</i>	-	+	No	
	<i>Daucus carota</i>	<i>I</i>	<i>W</i>	-	+	Yes	Fruit has hooked thorns, small seeds.
	<i>Eryngium bourgatii</i>	<i>I</i>	<i>G</i>	-	+	No	
	<i>Eryngium planum</i>	<i>I</i>	<i>W</i>	-	+	No	
Apocynaceae	<i>Catharanthus roseus</i>	*	-	-	-	No	
	<i>Tabernaemontana pandacaqui</i>	*	-	-	-	No	
Araceae	<i>Anthurium andraeanum</i>	<i>I</i>	-	-	-	No	
	<i>Lemna gibba</i>	<i>SP/I/W</i>	<i>W</i>	+	+	Yes	Duckweed: small seeds and (floating) reproductive plant structures (turions).
	<i>Lemna minor</i>	<i>SP/I/W</i>	<i>W</i>	+	+	Yes	Duckweed: small seeds and (floating)

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Araceae							reproductive plant structures (turions).
	<i>Spirodela polyrhiza</i>	SP/I/W	W	+	+	Yes	Duckweed: small seeds and (floating) reproductive plant structures (turions).
	<i>Spirodela punctata</i> (syn. <i>Landoltia punctata</i>)	SP /I/W	W	+	+	Yes	Duckweed: small seeds and (floating) reproductive plant structures (turions).
	<i>Wolffia globosa</i>	SP/I/W	- (wild relatives)	+	+	Yes	Duckweed: small seeds and (floating) reproductive plant structures (turions).
Asparagaceae	<i>Asparagus officinalis</i>	I/(SP)	W	-	+ (for male plants only)	Yes	Vegetative reproduction possible through rhizomes. Prevent spread of vegetative structures belowground in greenhouses with soil beds.
	<i>Hyacinthus orientalis</i>	I	W	-	+	No	
Asteraceae (Compositae)	<i>Bidens ferulifolia</i>	I	G	-	+	No	
	' <i>Brachyscome melanophora</i> '	I	G	-	+	No	
	' <i>Brachyscome multiflora</i> '	I	G	-	+	No	
	<i>Chrysanthemum</i> × <i>morifolium</i> (syn. <i>Dendranthema x grandiflora</i>)	*	-	-	-	No	
	<i>Cichorium endivia</i>	I/SP	W	-	+	No	
	<i>Cichorium intybus</i>	I	W	-	+	No	
	<i>Emilia sonchifolia</i>	I/(SP)	G	-	-	No	
	<i>Gerbera jamesonii</i>	*	-	-	-	No	

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Asteraceae (Compositae)	<i>Helianthus annuus</i>	SP/I	C	-	+	No	
	<i>Jacobaea vulgaris</i> subsp. <i>vulgaris</i>	I	W	-	+	Yes	Seeds with pappus.
	<i>Jacobaea vulgaris</i> subsp. <i>dunensis</i>	I	W	-	+	Yes	Seeds with pappus.
	<i>Lactuca saligna</i>	I	- (extinct native species with wild relatives)	-	+	Yes	Seeds with pappus.
	<i>Lactuca sativa</i>	I/SP	W	-	+	Yes	Seeds with pappus.
	<i>Lactuca serriola</i>	I	W	-	+	Yes	Seeds with pappus.
	<i>Pilosella aurantiaca</i> (syn. <i>Hieracium aurantiacum</i>)	I	W/G	-	+	Yes	Small seed with pappus.
	<i>Pilosella caespitosa</i> (syn. <i>Hieracium caespitosum</i>)	SP/I	W	-	+	Yes	Seeds with pappus.
	<i>Pilosella officinarum</i> (syn. <i>Hieracium pilosella</i>)	I	W/G	-	+	yes	Small seed with pappus.
	' <i>Sanvitalia speciosa</i> '	I	G	-	+	No	
	' <i>Solidago hybride</i> '	I	G	-	+	Yes	Small wind-dispersed seeds.
	<i>Stevia rebaudiana</i>	I/W	-	-	-	No	
	<i>Tagetes erecta</i>	I/SP	C/G	-	+	Yes	Achenes with hooks.
	<i>Tagetes patula</i>	I/SP	C/G	-	+	Yes	Achenes with hooks.
	<i>Tanacetum cinerarifolium</i>	I	G	-	+	Yes	Loose seeds.
	<i>Taraxacum campylodes</i> (syn. <i>Taraxacum officinale</i>)	I/A	W	-	+	Yes	Seeds with pappus.
	<i>Taraxacum kok-saghyz</i>	I/SP/W	- (wild relatives)	-	+	Yes	Seeds with pappus.
Begoniaceae	<i>Begonia grandis</i>	I	G	-	+	Yes	Small seeds.
Betulaceae	<i>Alnus glutinosa</i>	W	W	+	-	No	
	<i>Aethionema arabicum</i>	SP/(I)	-	-	-	Yes	Sticky seed with protrusions after imbibition.

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Brassicaceae	<i>Arabidopsis thaliana</i>	SP/I	W	-	+	Yes	Small seeds.
	<i>Boechera holboellii</i> (syn. <i>Arabis holboellii</i>)	A/SP/I	-	-	-	Yes	Pod that bursts open with small seeds.
	<i>Boechera stricta</i> (syn. <i>Arabis drummondii</i>)	A/SP/I	-	-	-	Yes	Pod that bursts open with small seeds.
	<i>Bornmuellera emarginata</i> (syn. <i>Leptoplax emarginata</i>)	I	-	-	-	No	
	<i>Bornmuellera tymphaea</i>	I	-	-	-	No	
	<i>Brassica napus</i>	SP/I/W	W	+	+	Yes	Small seeds that can be ejected. Asynchronous seed maturation.
	<i>Brassica oleracea</i>	I/W	W	+	+	Yes	Small seeds that can be ejected. Asynchronous seed maturation.
	<i>Brassica rapa</i>	I/W	W	+	+	Yes	Small seeds that can be ejected. Asynchronous seed maturation.
	<i>Camelina sativa</i>	SP/I	W	-	+	Yes	Small seeds that are ejected.
	<i>Cardamine flexuosa</i>	SP/(I)	W	-	+	Yes	Capsules eject seed.
	<i>Cardamine hirsuta</i>	SP/(I)	W	-	+	Yes	Capsules eject seed.
	<i>Crambe hispanica</i> subsp. <i>abyssinica</i> (syn. <i>Crambe abyssinica</i>)	SP/I	W	-	+	No	
	Brassicaceae	<i>Diplotaxis tenuifolia</i>	I/W	W	+	+	Yes
<i>Draba alyssoides</i>		SP/I	- (wild relatives)	-	+	No	
<i>Draba aretioides</i>		SP/I	- (wild relatives)	-	+	No	

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Brassicaceae	<i>Draba fladnizensis</i>	SP/I	- (wild relatives)	-	+	No	
	<i>Draba hookeri</i>	SP/I	- (wild relatives)	-	+	No	
	<i>Draba lactea</i>	SP/I	- (wild relatives)	-	+	No	
	<i>Draba muralis</i>	SP/I	W	-	+	Yes	Seeds held in capsule which can burst open.
	<i>Draba nivalis</i>	SP/I	- (wild relatives)	-	+	No	
	<i>Draba steyermarkii</i>	SP/I	- (wild relatives)	-	+	No	
	<i>Draba subcapitata</i>	SP/I	- (wild relatives)	-	+	No	
	<i>Draba verna</i> (syn. <i>Erophila verna</i>)	SP/I	W	-	+	Yes	Small seeds.
	<i>Eutrema halophilum</i> (syn. <i>Thellungiella halophila</i>)	SP/I	-	-	-	Yes	Small seeds.
	<i>Hirschfeldia incana</i>	I/SP	W	-	+	Yes	Small, sticky and lightweight seeds in capsule that bursts open.
	<i>Noccaea caerulescens</i> (syn. <i>Thlaspi caerulescens</i>)	SP/I	W	-	+	No	
	<i>Noccaea perfoliata</i> (syn. <i>Microthlaspi perfoliatum</i>)	SP/I	W	-	+	No	
	<i>Raphanus raphanistrum</i> subsp. <i>sativus</i> (syn. <i>Raphanus sativus</i>)	SP/I	W	-	+	No	
	<i>Rorippa amphibia</i> (syn. <i>Nasturtium amphibium</i>)	I	W	-	+	Yes	Small seeds in silique which can burst open. Clonal distribution through rhizomes needs to be prevented.

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	<i>Rorippa islandica</i>	SP/I	- (wild relatives)	-	+	Yes	Small seeds in siliqua which can burst open.
	<i>Rorippa palustris</i>	SP/I	W	-	+	Yes	Small seeds in siliqua which can burst open.
	<i>Rorippa sylvestris</i> (syn. <i>Nasturtium sylvestre</i>)	I	W	-	+	Yes	Small seeds in siliqua which can burst open. Clonal distribution through rhizomes needs to be prevented.
	<i>Schrenkiella parvula</i> (syn. <i>Thellungiella parvula</i> , <i>Eutrema parvulum</i>)	SP/I	-	-	-	Yes	Small seeds.
	<i>Thlaspi arvense</i>	SP/W/I	W	+	+	No	
Cannabaceae	<i>Cannabis sativa</i>	W/I	W	+ (for male inflorescences only)	+ (for male inflorescences only)	No	
	<i>Parasponia andersonii</i>	W/I	-	-	-	No	
	<i>Trema levigata</i>	W/I	-	-	-	No	
	<i>Trema orientalis</i>	SP/I/W	-	-	-	No	
	<i>Trema tomentosa</i>	SP/I/W	-	-	-	No	
Caryophyllaceae	<i>Dianthus caryophyllus</i>	I	G/C	-	-	No	
	<i>Gypsophila paniculata</i>	I	W	-	+	No	
Cleomaceae	<i>Cleome gynandra</i>	SP/I/W	-	-	-	No	
	<i>Cleome spinosa</i>	SP/I	G	-	-	No	
Convolvulaceae	<i>Ipomoea batatas</i>	I	C/G	-	-	No	
Crassulaceae	<i>Kalanchoe blossfeldiana</i>	SP/I/(B)	-	-	-	No	

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Cucurbitaceae	<i>Citrullus lanatus</i> (syn. <i>Citrullus vulgaris</i>)	<i>I</i>	<i>G</i>	-	+	No	
	<i>Cucumis melo</i>	<i>I</i>	<i>W</i>	-	+	No	
	<i>Cucumis sativus</i>	<i>I</i>	<i>W</i>	-	+	No	
	<i>Cucurbita pepo</i>	<i>I</i>	<i>W</i>	-	+	No	
Cucurbitaceae	<i>Momordica balsamina</i>	<i>I</i>	-	-	-	No	
	<i>Momordica charantia</i>	<i>I</i>	-	-	-	No	
	<i>Momordica cochinchinensis</i>	<i>I</i>	-	-	-	No	
Euphorbiaceae	<i>Jatropha curcas</i>	<i>I</i>	-	-	-	No	
	<i>Manihot esculenta</i>	*	-	-	-	No	
Fabaceae (Leguminosae)	<i>Arachis hypogaea</i>	<i>SP/I</i>	<i>W/G</i>	-	-	No	
	<i>Cicer arietinum</i>	<i>SP/I</i>	<i>W</i>	-	-	No	
	<i>Glycine max</i>	<i>SP/I</i>	<i>C/W</i>	-	-	No	
	<i>Lotus corniculatus</i> (syn. <i>Lotus japonicus</i>)	<i>I</i>	<i>W</i>	-	+	Yes	Pod ejects seeds when ripe.
	<i>Medicago truncatula</i>	<i>SP/I</i>	- (establishment cannot be excluded, no sexually compatible relatives)	-	-	Yes	Pods with thorns.

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	<i>Medicago x varia</i>	<i>I</i>	<i>W</i>	-	+	No	
	<i>Neptunia amplexicaulis</i>	<i>not relevant</i>	-	-	-	No	
	<i>Phaseolus vulgaris</i>	<i>I</i>	<i>W</i>	-	+	No	
	<i>Pisum sativum</i>	<i>SP/I</i>	<i>W</i>	-	+	No	
	<i>Trifolium repens</i>	<i>I</i>	<i>W</i>	-	+	Yes	Small seeds.
	<i>Vicia faba</i>	<i>SP/I</i>	<i>W</i>	-	+	No	
	<i>Vicia hirsuta</i>	<i>I</i>	<i>W</i>	-	+	Yes	Pod ejects seeds when ripe.
	<i>Vigna unguiculata</i>	<i>SP/I</i>	<i>G</i>	-	+	No	
Fagaceae	<i>Castanea mollissima</i>	<i>W/I</i>	<i>G</i>	+	+	No	
Fagaceae	<i>Castanea sativa</i>	<i>I/W</i>	<i>W</i>	+	+	No	
	<i>Quercus robur</i>	<i>W/I</i>	<i>W</i>	+	+	No	
Gentianaceae	<i>Eustoma grandiflorum</i>	<i>I/SP</i>	- <i>(commercial varieties)</i>	-	+	No	
Geraniaceae	<i>Geranium pyrenaicum</i>	<i>I/SP</i>	<i>W</i>	-	+	Yes	Achenes that can be ejected away from plant.
	<i>Geranium robertianum</i>	<i>I/SP</i>	<i>W</i>	-	+	Yes	Achenes with fibrous threads that can be ejected.
Gesneriaceae	<i>Saintpaulia ionantha</i>	*	-	-	-	No	
Grossulariaceae	<i>Ribes nigrum</i>	<i>SP/I</i>	<i>W</i>	-	+	Yes	Prevent the spread of vegetative structures belowground in greenhouses with soil beds.
	<i>Ribes rubrum</i>	<i>SP/I</i>	<i>W</i>	-	+	Yes	Prevent the spread of vegetative structures belowground in

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							greenhouses with soil beds.
Goodeniaceae	<i>Scaevola aemula</i>	<i>I</i>	<i>G</i>	-	+	No	
Hydrangeaceae	<i>Hydrangea macrophylla</i>	<i>I</i>	<i>W</i>	-	+	No	
Iridaceae	<i>Crocus sativus</i>	<i>I (only by sexually compatible relative as pollen donor)</i>	-	-	-	No	
Juglandaceae	<i>Juglans regia</i>	<i>W</i>	<i>W</i>	+	-	No	
Lamiaceae	<i>Scutellaria baicalensis</i>	<i>I</i>	<i>T</i>	-	+	No	
Liliaceae	<i>Lilium auratum</i>	<i>I</i>	<i>C</i>	-	-	No	
	<i>Lilium brownii</i>	<i>I</i>	<i>C</i>	-	-	No	
	<i>Lilium japonicum</i>	<i>I</i>	<i>C</i>	-	-	No	
	<i>Lilium longiflorum</i>	<i>I</i>	<i>C</i>	-	-	No	
	<i>Lilium nobilissimum</i>	<i>I</i>	<i>C</i>	-	-	No	
Liliaceae	<i>Lilium platyphyllum</i> (syn. <i>Lilium auratum</i> var. <i>platyphyllum</i>)	<i>I</i>	<i>C</i>	-	-	No	
	<i>Lilium rubellum</i>	<i>I</i>	<i>C</i>	-	-	No	
	<i>Lilium speciosum</i>	<i>I</i>	<i>C</i>	-	-	No	
	<i>Tulipa gesneriana</i>	<i>I</i>	<i>C</i>	-	-	No	
Linaceae	<i>Linum usitatissimum</i>	<i>SP/I</i>	<i>W</i>	-	+	No	
Linderniaceae	<i>Craterostigma plantagineum</i>	<i>I</i>	-	-	-	No	
Malvaceae	<i>Abelmoschus esculentus</i>	<i>I</i>	<i>G/C</i>	-	+	No	
	<i>Gossypium hirsutum</i>	<i>I</i>	-	-	+	No	
	<i>Theobroma cacao</i>	<i>I/SP</i>	-	-	-	No	

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Marantaceae	<i>Calathea roseopicta</i>	I/SP	-	-	-	No	
Musaceae	<i>Musa acuminata</i>	*	-	-	-	No	
Nyctaginaceae	'Bougainvillea vera'	I	-	-	-	No	
Onagraceae	<i>Fuchsia hybrida</i>	I/(B)	G	-	+	No	
Orchidaceae	<i>Phalaenopsis amabilis</i>	I	-	-	-	No	
	<i>Vanilla planifolia</i>	I	C/(G)	-	-	No	
Plantaginaceae	<i>Antirrhinum majus</i>	I	W	-	+	No	
Poaceae	<i>Agrostis capillaris</i> (syn. <i>Agrostis tenuis</i>)	W	W	+	-	Yes	Small seeds.
	<i>Agrostis stolonifera</i>	W	W	+	-	Yes	Small seeds.
	<i>Avena sativa</i>	SP/W	W	+	-	No	
	<i>Brachypodium distachyon</i>	SP/W	- (establishment cannot be excluded; wild relatives present)	+	-	Yes	Light seeds with awns.
	<i>Dactylis glomerata</i>	W	W	+	-	Yes	Small seeds.
	<i>Hordeum vulgare</i>	SP/W	W	+	-	No	
	<i>Miscanthus floridulus</i>	W	G	+	-	Yes	Small seeds.
	<i>Miscanthus giganteus</i>	W	W	+	-	Yes	Small seeds.
Poaceae	<i>Miscanthus lutarioriparius</i> (syn. <i>Miscanthus sacchariflorus</i> subsp. <i>lutarioriparius</i>)	W	- (establishment cannot be excluded; wild relatives present)	+	-	Yes	Small seeds. Prevent the spread of vegetative structures belowground in greenhouses with soil beds.

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	<i>Miscanthus sacchariflorus</i>	W	W	+	-	Yes	Small seeds. Prevent the spread of vegetative structures belowground in greenhouses with soil beds.
	<i>Miscanthus sinensis</i>	W	W	+	-	Yes	Small seeds.
	<i>Oryza sativa</i>	SP/W/I	-	-	-	No	
	<i>Panicum virgatum</i>	W	G/W	+	-	Yes	Small seeds. Prevent the spread of vegetative structures belowground in greenhouses with soil beds.
	<i>Phleum pratense</i>	W	W	+	-	Yes	Small seeds.
	<i>Poa pratensis</i>	SP/A/W	W	+	-	Yes	Small seeds.
	<i>Poa trivialis</i>	W	W	+	-	Yes	Small seeds.
	<i>Sorghum bicolor</i>	SP/W	W	+	-	No	
	<i>Triticum aestivum</i>	SP/W	W	+	-	No	
	<i>Triticum durum</i> (syn. <i>Triticum turgidum</i> subsp. <i>durum</i>)	SP/W	C	+	-	No	
	<i>Zea mays</i>	W/SP	C/W	-	-	No	
Polemoniaceae	<i>Phlox paniculata</i>	I	G	-	+	No	
Polygonaceae	<i>Rumex palustris</i>	W	W	+	-	No	
Primulaceae	<i>Cyclamen persicum</i>	I	- (related garden plants)	-	+	No	
Ranunculaceae	<i>Delphinium elatum</i> (syn. <i>Delphinium belladonna</i>)	I	G/C	-	+	No	
	<i>Fragaria vesca</i>	SP/I	W	-	+	No	

Seed plants (Spermatophyta)		Characteristics		Physical containment measures required			
Family	Species/Genus	Pollination ¹	Presence in the Netherlands ²	Prevent wind pollination	Prevent insect pollination	Additional measures necessary for seeds and/or soil	Reason for additional containment measure for seeds and/or soil
Rosaceae	<i>Fragaria x ananassa</i>	SP/I	W	-	+	No	
	<i>Malus domestica</i>	I/W	W	+	+	No	
	<i>Pyrus communis</i> (= <i>P. domestica</i>)	I/W	W	+	+	No	
	<i>Rosa</i> cultivar groups (broken down): Climbing floribunda Climbing Grandiflora Climbing Hybrid Tea Climbing Miniature Climbing Polyantha Floribunda Grandiflora Hybrid Kordesii Hybrid Moyesii Hybrid Musk Hybrid Rugosa Hybrid Tea Hybrid Wichurana Large Flowered Climber Miniature Mini-Flora Polyantha	*	G	-	-	No	
	<i>Rubus allegheniensis</i>	I/W	- (establishment cannot be excluded; wild and cultivated relatives present)	+	+	Yes	Prevent the spread of vegetative structures belowground in greenhouses with soil beds.
	<i>Populus tomentosa</i>	W	G	+	-	Yes	Prevent the spread of vegetative structures belowground in greenhouses with soil beds.
	<i>Populus trichocarpa</i>	W	W	+	-	Yes	Prevent the spread of vegetative structures

Seed plants (Spermatophyta)		Characteristics		Physical containment measures required			
Family	Species/Genus	Pollination ¹	Presence in the Netherlands ²	Prevent wind pollination	Prevent insect pollination	Additional measures necessary for seeds and/or soil	Reason for additional containment measure for seeds and/or soil
							belowground in greenhouses with soil beds.
	<i>Salix alba</i>	I/W	W	+ (for male inflorescences only)	+ (for male inflorescences only)	Yes (for plants with female inflorescences only)	Seeds with pappus.
	<i>Salix babylonica</i> (syn. <i>Salix matsudana</i>)	I/W	W	+ (for male inflorescences only)	+ (for male inflorescences only)	Yes (for plants with female inflorescences only)	Seeds with pappus.
Scrophulariaceae	'Sutera diffusa'	I	W	-	+	No	
Solanaceae	<i>Capsicum annuum</i>	I	W	-	+	No	
	<i>Capsicum baccatum</i>	SP/I	C/G	-	+	No	
	<i>Capsicum cardenasii</i>	I	- (sexually compatible relatives present)	-	+	No	
	<i>Capsicum chacoense</i>	SP/I	- (sexually compatible relatives present)	-	+	No	
	<i>Capsicum chinense</i>	SP/I	C	-	+	No	
	<i>Capsicum eximium</i>	SP/I	- (sexually compatible relatives present)				
	<i>Capsicum frutescens</i>	SP/I	C/G	-	+	No	
	<i>Capsicum galapagoense</i>	SP/I	- (sexually compatible relatives present)	-	+	No	
	<i>Capsicum pubescens</i>	SP/I	C/G	-	+	No	
	<i>Capsicum tovarii</i>	SP/I	- (sexually compatible relatives present)	-	+	No	

Seed plants (Spermatophyta)		Characteristics		Physical containment measures required			
Family	Species/Genus	Pollination ¹	Presence in the Netherlands ²	Prevent wind pollination	Prevent insect pollination	Additional measures necessary for seeds and/or soil	Reason for additional containment measure for seeds and/or soil
Solanaceae	<i>Datura stramonium</i>	SP/I	W	-	+	No	
	<i>Nicotiana benthamiana</i>	I	-	-	-	Yes	Small seeds.
	<i>Nicotiana sylvestris</i>	I	W	-	+	Yes	Small seeds.
	<i>Nicotiana tabacum</i>	I	W	-	+	Yes	Small seeds.
	<i>Petunia hybrida</i>	SP/I/(B)	W	-	+	Yes	Small seeds.
	<i>Salpiglossis sinuata</i>	I/SP	G	-	+	No	
	<i>Solanum</i> sectie <i>Basarthurum</i>						
	<i>Solanum fraxinifolium</i>	I/W	-	-	-	No	
	<i>Solanum muricatum</i>	SP/I/W	G	-	-	No	
	<i>Solanum</i> sectie <i>Dulcamara</i>						
	<i>Solanum dulcamara</i>	SP/I/W	W	-	+	No	
	<i>Solanum</i> sectie <i>Etuberosum</i>						
	<i>Solanum etuberosum</i>	irrelevant	-	-	-	No	
	<i>Solanum fernandezianum</i>	irrelevant	-	-	-	No	
	<i>Solanum palustre</i>	irrelevant	-	-	-	No	
	<i>Solanum</i> sectie <i>Herpystichum</i>						
	<i>Solanum trifolium</i>	irrelevant	-	-	-	No	
	<i>Solanum</i> sectie <i>Lycopersicoides</i>						
	<i>Solanum lycopersicoides</i>	irrelevant	-	-	-	No	
	<i>Solanum sitiens</i>	irrelevant	-	-	-	No	
<i>Solanum</i> sectie <i>Lycopersicon</i>							
<i>Solanum cheesmaniae</i>	SP/I/W	- (sexually compatible relative of <i>S. lycopersicum</i>)	-	+	No		

Seed plants (Spermatophyta)		Characteristics		Physical containment measures required			
Family	Species/Genus	Pollination ¹	Presence in the Netherlands ²	Prevent wind pollination	Prevent insect pollination	Additional measures necessary for seeds and/or soil	Reason for additional containment measure for seeds and/or soil
Solanaceae	<i>Solanum chilense</i>	I/W	- (sexually compatible relative of <i>S. lycopersicum</i>)	-	+	No	
	<i>Solanum chmielewskii</i>	SP/I/W	- (sexually compatible relative of <i>S. lycopersicum</i>)	-	+	No	
	<i>Solanum galapagense</i>	SP/I/W	- (sexually compatible relative of <i>S. lycopersicum</i>)	-	+	No	
	<i>Solanum habrochaites</i>	I/W	- (sexually compatible relative of <i>S. lycopersicum</i>)	-	+	No	
	<i>Solanum lycopersicum</i>	SP/I/W	W	-	+	No	
	<i>Lycopersicon pennellii</i> (syn. <i>Solanum pennellii</i>)	SP/I/W	- (sexually compatible relative of <i>S. lycopersicum</i>)	-	+	No	
	<i>Solanum pimpinellifolium</i>	SP/I/W	- (sexually compatible relative of <i>S. lycopersicum</i>)	-	+	No	
	<i>Solanum peruvianum</i>	I/W	- (sexually compatible relative of <i>S. lycopersicum</i>)	-	+	No	
	<i>Solanum</i> sectie <i>Melongena</i>						
	<i>Solanum melongena</i>	SP/I/W	G	-	+	No	
	<i>Solanum violaceum</i>	SP/I/W	-	-	+	No	
	<i>Solanum</i> sectie <i>Petota</i>						
	<i>Solanum acaule</i>	irrelevant	-	-	-	No	
	<i>Solanum agrimonifolium</i>	irrelevant	-	-	-	No	
	<i>Solanum agroglossum</i>	irrelevant	-	-	-	No	
	<i>Solanum ajanhuiri</i>	irrelevant	-	-	-	No	
<i>Solanum alandiae</i>	irrelevant	-	-	-	No		

Seed plants (Spermatophyta)		Characteristics		Physical containment measures required			
Family	Species/Genus	Pollination ¹	Presence in the Netherlands ²	Prevent wind pollination	Prevent insect pollination	Additional measures necessary for seeds and/or soil	Reason for additional containment measure for seeds and/or soil
Solanaceae	<i>Solanum albicans</i>	irrelevant	-	-	-	No	
	<i>Solanum albornozii</i>	irrelevant	-	-	-	No	
	<i>Solanum andigena</i>	irrelevant	-	-	-	No	
	<i>Solanum andreanum</i>	irrelevant	-	-	-	No	
	<i>Solanum aracc-papa</i>	irrelevant	-	-	-	No	
	<i>Solanum arnezii</i>	irrelevant	-	-	-	No	
	<i>Solanum astleyi</i>	irrelevant	-	-	-	No	
	<i>Solanum avilesii</i>	irrelevant	-	-	-	No	
	<i>Solanum berthaultii</i>	irrelevant	-	-	-	No	
	<i>Solanum boliviense</i>	irrelevant	-	-	-	No	
	<i>Solanum brachistotrichum</i>	irrelevant	-	-	-	No	
	<i>Solanum brachycarpum</i>	irrelevant	-	-	-	No	
	<i>Solanum bukasovii</i>	irrelevant	-	-	-	No	
	<i>Solanum bulbocastanum</i>	I/W	- (no sexually compatible relatives)	-	-	No	
	<i>Solanum candolleanum</i>	irrelevant	-	-	-	No	
	<i>Solanum cantense</i>	irrelevant	-	-	-	No	
	<i>Solanum capsicibaccatum</i>	irrelevant	-	-	-	No	
	<i>Solanum cardiophyllum</i>	irrelevant	-	-	-	No	
	<i>Solanum chacoense</i>	irrelevant	-	-	-	No	
	<i>Solanum chomatophilum</i>	irrelevant	-	-	-	No	
<i>Solanum circaefolium</i>	irrelevant	-	-	-	No		

Seed plants (Spermatophyta)		Characteristics		Physical containment measures required			
Family	Species/Genus	Pollination ¹	Presence in the Netherlands ²	Prevent wind pollination	Prevent insect pollination	Additional measures necessary for seeds and/or soil	Reason for additional containment measure for seeds and/or soil
Solanaceae	<i>Solanum clarum</i>	irrelevant	-	-	-	No	
	<i>Solanum colombianum</i>	irrelevant	-	-	-	No	
	<i>Solanum commersonii</i>	irrelevant	-	-	-	No	
	<i>Solanum demissum</i>	irrelevant	-	-	-	No	
	<i>Solanum doddsii</i>	irrelevant	-	-	-	No	
	<i>Solanum x edinense</i>	irrelevant	-	-	-	No	
	<i>Solanum ehrenbergii</i>	irrelevant	-	-	-	No	
	<i>Solanum fendlerii</i>	irrelevant	-	-	-	No	
	<i>Solanum gandarillasii</i>	irrelevant	-	-	-	No	
	<i>Solanum gourlayi</i>	irrelevant	-	-	-	No	
	<i>Solanum guerrercense</i>	irrelevant	-	-	-	No	
	<i>Solanum hawkesianum</i>	irrelevant	-	-	-	No	
	<i>Solanum hjertingii</i>	irrelevant	-	-	-	No	
	<i>Solanum hondelmannii</i>	irrelevant	-	-	-	No	
	<i>Solanum hoopesii</i>	irrelevant	-	-	-	No	
	<i>Solanum hougasii</i>	irrelevant	-	-	-	No	
	<i>Solanum huancabambense</i>	irrelevant	-	-	-	No	
	<i>Solanum immite</i>	irrelevant	-	-	-	No	
	<i>Solanum incamayoense</i>	irrelevant	-	-	-	No	
	<i>Solanum iopetalum</i>	irrelevant	-	-	-	No	
<i>Solanum jamesii</i>	irrelevant	-	-	-	No		
<i>Solanum kurtzianum</i>	irrelevant	-	-	-	No		

Seed plants (Spermatophyta)		Characteristics		Physical containment measures required			
Family	Species/Genus	Pollination ¹	Presence in the Netherlands ²	Prevent wind pollination	Prevent insect pollination	Additional measures necessary for seeds and/or soil	Reason for additional containment measure for seeds and/or soil
Solanaceae	<i>Solanum leptophyes</i>	irrelevant	-	-	-	No	
	<i>Solanum lesteri</i>	irrelevant	-	-	-	No	
	<i>Solanum longiconicum</i>	irrelevant	-	-	-	No	
	<i>Solanum marinasense</i>	irrelevant	-	-	-	No	
	<i>Solanum megistacrolobum</i>	irrelevant	-	-	-	No	
	<i>Solanum michoacanum</i>	irrelevant	-	-	-	No	
	<i>Solanum microdontum</i>	irrelevant	-	-	-	No	
	<i>Solanum mochiquense</i>	irrelevant	-	-	-	No	
	<i>Solanum morelliforme</i>	irrelevant	-	-	-	No	
	<i>Solanum moscopanum</i>	irrelevant	-	-	-	No	
	<i>Solanum multiinterruptum</i>	irrelevant	-	-	-	No	
	<i>Solanum neocardenasii</i>	irrelevant	-	-	-	No	
	<i>Solanum neorossii</i>	irrelevant	-	-	-	No	
	<i>Solanum okadae</i>	irrelevant	-	-	-	No	
	<i>Solanum oplocense</i>	irrelevant	-	-	-	No	
	<i>Solanum oxycarpum</i>	irrelevant	-	-	-	No	
	<i>Solanum pampasense</i>	irrelevant	-	-	-	No	
	<i>Solanum papita</i>	irrelevant	-	-	-	No	
	<i>Solanum paucisectum</i>	irrelevant	-	-	-	No	
	<i>Solanum phureja</i>	irrelevant	-	-	-	No	
<i>Solanum pinnatisectum</i>	irrelevant	-	-	-	No		
<i>Solanum piurana</i>	irrelevant	-	-	-	-	No	

Seed plants (Spermatophyta)		Characteristics		Physical containment measures required			
Family	Species/Genus	Pollination ¹	Presence in the Netherlands ²	Prevent wind pollination	Prevent insect pollination	Additional measures necessary for seeds and/or soil	Reason for additional containment measure for seeds and/or soil
Solanaceae	<i>Solanum polyadenium</i>	irrelevant	-	-	-	No	
	<i>Solanum polytrichon</i>	irrelevant	-	-	-	No	
	<i>Solanum raphanifolium</i>	irrelevant	-	-	-	No	
	<i>Solanum ruiz-lealii</i>	irrelevant	-	-	-	No	
	<i>Solanum x sambucinum</i>	irrelevant	-	-	-	No	
	<i>Solanum sandemanii</i>	irrelevant	-	-	-	No	
	<i>Solanum schenckii</i>	irrelevant	-	-	-	No	
	<i>Solanum semidemissum</i>	irrelevant	-	-	-	No	
	<i>Solanum sparsipilum</i>	irrelevant	-	-	-	No	
	<i>Solanum spegazzinii</i>	irrelevant	-	-	-	No	
	<i>Solanum stenotomum</i>	irrelevant	-	-	-	No	
	<i>Solanum stoloniferum</i>	irrelevant	-	-	-	No	
	<i>Solanum sucrense</i>	irrelevant	-	-	-	No	
	<i>Solanum tarijense</i>	Z/I/W	-	-	-	No	
	<i>Solanum tarnii</i>	irrelevant	-	-	-	No	
	<i>Solanum tuberosum</i>	SP/I/W	W	-	-	No	
	<i>Solanum venturii</i>	irrelevant	-	-	-	No	
	<i>Solanum vernei</i>	irrelevant	-	-	-	No	
	<i>Solanum verrucosum</i>	SP/I/W	-	-	-	No	
	<i>Solanum virgultorum</i>	irrelevant	-	-	-	No	
<i>Solanum x blanco-galdosii</i>	irrelevant	-	-	-	No		
<i>Solanum</i> sectie <i>Solanum</i>						No	

Seed plants (Spermatophyta)		Characteristics		Physical containment measures required			
Family	Species/Genus	Pollination ¹	Presence in the Netherlands ²	Prevent wind pollination	Prevent insect pollination	Additional measures necessary for seeds and/or soil	Reason for additional containment measure for seeds and/or soil
	<i>Solanum nigrum</i>	SP/I/W	W	-	+	No	
	<i>Solanum</i> subgenus <i>Archaeosolanum</i>						
	<i>Solanum aviculare</i>	irrelevant	-	-	-	No	
Vitaceae	<i>Vitis vinifera</i>	SP/I/W	W	+	+	Yes	Vegetative reproduction possible through rhizomes. Prevent the spread of vegetative structures belowground in greenhouses with soil beds.
Zingiberaceae	<i>Curcuma longa</i>	I	-	-	-	No	

Ad 1) Pollination: A = apomictic, I = insect pollination, B = bird pollination, W = wind pollination, SP = self-pollination, * = no seeds can develop under Dutch conditions.

Ad 2) Presence in the Netherlands: W = (wild) included in the National Flora and Fauna Database: is commonly present in the Netherlands or is incidentally observed³, C = (cultivated) is cultivated in the Netherlands, G = (garden) grown in gardens, - = not found outdoors in the Netherlands.

3. Nationale Databank Flora en Fauna – Verspreidingsatlas. www.verspreidingsatlas.nl (visited: September 2023)

Table 1b. Additional containment measures for activities involving GM seed plants (Spermatophyta) under ‘contained use’ – alphabetic order based on species name.

Seed plants (Spermatophyta)	Characteristics		Physical containment measures required			
	Species/Genus	Pollination ¹	Presence in the Netherlands ²	Prevent wind pollination	Prevent insect pollination	Additional measures necessary for seeds and/or soil
<i>Abelmoschus esculentus</i>	<i>I</i>	<i>G/C</i>	-	+	No	
<i>Aethionema arabicum</i>	<i>SP(I)</i>	-	-	-	Yes	Sticky seed with protrusions after imbibition.
<i>Agrostis capillaris</i> (syn. <i>Agrostis tenuis</i>)	<i>W</i>	<i>W</i>	+	-	Yes	Small seeds.
<i>Agrostis stolonifera</i>	<i>W</i>	<i>W</i>	+	-	Yes	Small seeds.
<i>Allium ampeloprasum</i> (syn. <i>Allium porrum</i>)	<i>I</i>	<i>W</i>	-	+	Yes	Wind dispersal: seeds are 'ejected' by plant.
<i>Allium cepa</i>	<i>I</i>	<i>W</i>	-	+	Yes	Wind dispersal: seeds are 'ejected' by plant.
<i>Allium sativum</i>	<i>I</i>	<i>C</i> (sterile)	-	-	No	
<i>Alnus glutinosa</i>	<i>W</i>	<i>W</i>	+	-	No	
<i>Anthriscus sylvestris</i>	<i>I</i>	<i>W</i>	-	+	No	
<i>Anthurium andraeanum</i>	<i>I</i>	-	-	-	No	
<i>Antirrhinum majus</i>	<i>I</i>	<i>W</i>	-	+	No	
<i>Arabidopsis thaliana</i>	<i>SP/I</i>	<i>W</i>	-	+	Yes	Small seeds.
<i>Arachis hypogaea</i>	<i>SP/I</i>	<i>W</i>	-	-	No	
<i>Asparagus officinalis</i>	<i>I(SP)</i>	<i>W</i>	-	+	Yes	Vegetative reproduction possible through rhizomes. Prevent the spread of vegetative structures belowground in greenhouses with soil beds.
<i>Avena sativa</i>	<i>SP/W</i>	<i>W</i>	+	-	No	
<i>Begonia grandis</i>	<i>I</i>	<i>G</i>	-	+	Yes	Small seeds.

Seed plants (Spermatophyta)	Characteristics		Physical containment measures required			
Species/Genus	Pollination ¹	Presence in the Netherlands ²	Prevent wind pollination	Prevent insect pollination	Additional measures necessary for seeds and/or soil	Reason for additional containment measure for seed and/or soil
<i>Beta vulgaris</i>	<i>W/I</i>	<i>W</i>	+	+	No	
<i>Bidens ferulifolia</i>	<i>I</i>	<i>G</i>	-	+	No	
<i>Boechera holboellii</i> (syn. <i>Arabis holboellii</i>)	<i>A/SP/I</i>	-	-	-	Yes	Pod that bursts open with small seeds.
<i>Boechera stricta</i> (syn. <i>Arabis drummondii</i>)	<i>A/SP/I</i>	-	-	-	Yes	Pod that bursts open with small seeds.
<i>Bornmuellera emarginata</i> (syn. <i>Leptoplax emarginata</i>)	<i>I</i>	-	-	-	No	
<i>Bornmuellera tymphaea</i>	<i>I</i>	-	-	-	No	
' <i>Bougainvillea vera</i> '	<i>I</i>	-	-	-	No	
<i>Brachypodium distachyon</i>	<i>SP/W</i>	- (establishment cannot be excluded; wild relatives present)	+	-	Yes	Light seeds with awns.
' <i>Brachyscome melanophora</i> '	<i>I</i>	<i>G</i>	-	+	No	
' <i>Brachyscome multiflora</i> '	<i>I</i>	<i>G</i>	-	+	No	
<i>Brassica napus</i>	<i>SP/I/W</i>	<i>W</i>	+	+	Yes	Small seeds that can be ejected. Asynchronous seed maturation.
<i>Brassica oleracea</i>	<i>I/W</i>	<i>W</i>	+	+	Yes	Small seeds that can be ejected. Asynchronous seed maturation.
<i>Brassica rapa</i>	<i>I/W</i>	<i>W</i>	+	+	Yes	Small seeds that can be ejected. Asynchronous seed maturation.
<i>Calathea roseopicta</i>	<i>I/SP</i>	-	-	-	No	
<i>Camelina sativa</i>	<i>SP/I</i>	<i>W</i>	-	+	Yes	Small seeds that are ejected.
<i>Cannabis sativa</i>	<i>W/I</i>	<i>W</i>	+ (for male inflorescences only)	+ (for male inflorescences only)	No	
<i>Capsicum annuum</i>	<i>I</i>	<i>W</i>	-	+	No	

Seed plants (Spermatophyta)	Characteristics		Physical containment measures required			
Species/Genus	Pollination ¹	Presence in the Netherlands ²	Prevent wind pollination	Prevent insect pollination	Additional measures necessary for seeds and/or soil	Reason for additional containment measure for seed and/or soil
<i>Capsicum baccatum</i>	SP/I	C/G	-	+	No	
<i>Capsicum cardenasii</i>	I	- (sexually compatible relatives present)	-	+	No	
<i>Capsicum chacoense</i>	SP/I	-	-	+	No	
<i>Capsicum chinense</i>	SP/I	C	-	+	No	
<i>Capsicum eximium</i>	SP/I	- (sexually compatible relatives present)	-	+	No	
<i>Capsicum frutescens</i>	SP/I	C/G	-	+	No	
<i>Capsicum galapagoense</i>	SP/I	- (sexually compatible relatives present)	-	+	No	
<i>Capsicum pubescens</i>	SP/I	C/G	-	+	No	
<i>Capsicum tovarii</i>	SP/I	- (sexually compatible relatives present)	-	+	No	
<i>Cardamine flexuosa</i>	SP/(I)	W	-	+	Yes	Capsules eject seed.
<i>Cardamine hirsuta</i>	SP/(I)	W	-	+	Yes	Capsules eject seed.
<i>Castanea mollissima</i>	W/I	G	+	+	No	
<i>Castanea sativa</i>	I/W	W	+	+	No	
<i>Catharanthus roseus</i>	*	-	-	-	No	
<i>Chenopodium quinoa</i>	SP/I/W	W	+	+	Yes	Small seeds.
<i>Chrysanthemum</i> × <i>morifolium</i> (syn. <i>Dendranthema</i> × <i>grandiflora</i>)	*	-	-	-	No	
<i>Cicer arietinum</i>	SP/I	W	-	-	No	
<i>Cichorium endivia</i>	I/SP	W	-	+	No	

Seed plants (Spermatophyta)	Characteristics		Physical containment measures required			
Species/Genus	Pollination ¹	Presence in the Netherlands ²	Prevent wind pollination	Prevent insect pollination	Additional measures necessary for seeds and/or soil	Reason for additional containment measure for seed and/or soil
<i>Cichorium intybus</i>	<i>I</i>	<i>W</i>	-	+	No	
<i>Citrullus lanatus</i> (syn. <i>Citrullus vulgaris</i>)	<i>I</i>	<i>G</i>	-	+ (for male inflorescences only)	No	
<i>Cleome gynandra</i>	<i>SP/I/W</i>	-	-	-	No	
<i>Cleome spinosa</i>	<i>SP/I</i>	<i>G</i>	-	-	No	
<i>Crambe hispanica</i> subsp. <i>abyssinica</i> (syn. <i>Crambe abyssinica</i>)	<i>SP/I</i>	<i>W</i>	-	+	No	
<i>Craterostigma plantagineum</i>	<i>I</i>	-	-	-	No	
<i>Crocus sativus</i>	<i>I</i> (only by sexually compatible relative as pollen donor)	-	-	-	No	
<i>Cucumis melo</i>	<i>I</i>	<i>W</i>	-	+ (for male inflorescences only)	No	
<i>Cucumis sativus</i>	<i>I</i>	<i>W</i>	-	+ (for male inflorescences only)	No	
<i>Cucurbita pepo</i>	<i>I</i>	<i>W</i>	-	+ (for male inflorescences only)	No	
<i>Curcuma longa</i>	<i>I</i>	-	-	-	No	
<i>Cyclamen persicum</i>	<i>I</i>	- (related garden plants)	-	+	No	
<i>Dactylis glomerata</i>	<i>W</i>	<i>W</i>	+	-	Yes	Small seeds.
<i>Datura stramonium</i>	<i>SP/I</i>	<i>W</i>	-	+	No	
<i>Daucus carota</i>	<i>I</i>	<i>W</i>	-	+	Yes	Fruit has hooked thorns, small seeds.

Seed plants (Spermatophyta)	Characteristics		Physical containment measures required			
Species/Genus	Pollination ¹	Presence in the Netherlands ²	Prevent wind pollination	Prevent insect pollination	Additional measures necessary for seeds and/or soil	Reason for additional containment measure for seed and/or soil
<i>Delphinium elatum</i> (syn. <i>Delphinium belladonna</i>)	I	G/C	-	+	No	
<i>Dianthus caryophyllus</i>	I	G/C	-	-	No	
<i>Diplotaxis tenuifolia</i>	I/W	W	+	+	Yes	Fruit can burst open to allow seeds to drop onto the ground.
<i>Draba alyssoides</i>	SP/I	- (wild relatives)	-	+	No	
<i>Draba aretioides</i>	SP/I	- (wild relatives)	-	+	No	
<i>Draba fladnizensis</i>	SP/I	- (wild relatives)	-	+	No	
<i>Draba hookeri</i>	SP/I	- (wild relatives)	-	+	No	
<i>Draba lactea</i>	SP/I	- (wild relatives)	-	+	No	
<i>Draba muralis</i>	SP/I	W	-	+	Yes	Seeds held in capsule that bursts open.
<i>Draba nivalis</i>	SP/I	- (wild relatives)	-	+	No	
<i>Draba steyermarkii</i>	SP/I	- (wild relatives)	-	+	No	
<i>Draba subcapitata</i>	SP/I	- (wild relatives)	-	+	No	
<i>Draba verna</i> (syn. <i>Erophila verna</i>)	SP/I	W	-	+	Yes	Small seeds.
<i>Emilia sonchifolia</i>	I/(SP)	G	-	-	No	
<i>Eryngium bourgatii</i>	I	G	-	+	No	
<i>Eryngium planum</i>	I	W	-	+	No	
<i>Eustoma grandiflorum</i>	I/SP	- (commercial varieties)	-	+	No	
<i>Eutrema halophilum</i> (syn. <i>Thellungiella halophila</i>)	SP/I	-	-	-	Yes	Small seeds.
<i>Fragaria vesca</i>	SP/I	W	-	+	No	

Seed plants (Spermatophyta)	Characteristics		Physical containment measures required			
Species/Genus	Pollination ¹	Presence in the Netherlands ²	Prevent wind pollination	Prevent insect pollination	Additional measures necessary for seeds and/or soil	Reason for additional containment measure for seed and/or soil
<i>Fragaria x ananassa</i>	SP/I	W	-	+	No	
<i>Fuchsia hybrida</i>	I/(B)	G	-	+	No	
<i>Geranium pyrenaicum</i>	I/SP	W	-	+	Yes	Achenes that can be ejected away from the plant.
<i>Geranium robertianum</i>	I/SP	W	-	+	Yes	Achenes with fibrous threads that can be ejected.
<i>Gerbera jamesonii</i>	*	-	-	-	No	
<i>Glycine max</i>	SP/I	C/W	-	-	No	
<i>Gomphrena claussenii</i>	I	-	-	-	No	
<i>Gomphrena elegans</i>	I	-	-	-	No	
<i>Gossypium hirsutum</i>	I	-	-	+	No	
<i>Gypsophila paniculata</i>	I	W	-	+	No	
<i>Helianthus annuus</i>	SP/I	C	-	+	No	
<i>Hirschfeldia incana</i>	I/SP	W	-	+	Yes	Small, sticky and lightweight seeds in capsule which can burst open.
<i>Hordeum vulgare</i>	SP/W	W	+	-	No	
<i>Hyacinthus orientalis</i>	I	W	-	+	No	
<i>Hydrangea macrophylla</i>	I	W	-	+	No	
<i>Ipomoea batatas</i>	I	C/G	-	-	No	
<i>Jacobaea vulgaris</i> subsp. <i>dunensis</i>	I	W	-	+	Yes	Seeds with pappus.
<i>Jacobaea vulgaris</i> subsp. <i>vulgaris</i>	I	W	-	+	Yes	Seeds with pappus.
<i>Jatropha curcas</i>	I	-	-	-	No	
<i>Juglans regia</i>	W	W	+	-	No	
<i>Kalanchoe blossfeldiana</i>	SP/I/(B)	-	-	-	No	

Seed plants (Spermatophyta)	Characteristics		Physical containment measures required			
Species/Genus	Pollination ¹	Presence in the Netherlands ²	Prevent wind pollination	Prevent insect pollination	Additional measures necessary for seeds and/or soil	Reason for additional containment measure for seed and/or soil
<i>Lactuca saligna</i>	<i>I</i>	- (extinct native species with wild relatives)	-	+	Yes	Seeds with pappus.
<i>Lactuca sativa</i>	<i>I/SP</i>	<i>W</i>	-	+	Yes	Seeds with pappus.
<i>Lactuca serriola</i>	<i>I</i>	<i>W</i>	-	+	Yes	Seeds with pappus.
<i>Lemna gibba</i>	<i>SP/I/W</i>	<i>W</i>	+	+	Yes	Duckweed: small seeds and (floating) reproductive plant structures (turions).
<i>Lemna minor</i>	<i>SP/I/W</i>	<i>W</i>	+	+	Yes	Duckweed: small seeds and (floating) reproductive plant structures (turions).
<i>Lilium auratum</i>	<i>I</i>	<i>C</i>	-	-	No	
<i>Lilium brownii</i>	<i>I</i>	<i>C</i>	-	-	No	
<i>Lilium japonicum</i>	<i>I</i>	<i>C</i>	-	-	No	
<i>Lilium longiflorum</i>	<i>I</i>	<i>C</i>	-	-	No	
<i>Lilium nobilissimum</i>	<i>I</i>	<i>C</i>	-	-	No	
<i>Lilium platyphyllum</i> (syn. <i>Lilium auratum</i> var. <i>platyphyllum</i>)	<i>I</i>	<i>C</i>	-	-	No	
<i>Lilium rubellum</i>	<i>I</i>	<i>C</i>	-	-	No	
<i>Lilium speciosum</i>	<i>I</i>	<i>C</i>	-	-	No	
<i>Linum usitatissimum</i>	<i>SP/I</i>	<i>W</i>	-	+	No	
<i>Lotus corniculatus</i> (syn. <i>Lotus japonicus</i>)	<i>I</i>	<i>W</i>	-	+	Yes	Pod ejects seeds when ripe.
<i>Lycopersicon pennellii</i> (syn. <i>Solanum pennellii</i>)	<i>SP/I/W</i>	- (sexually compatible relative of <i>S. lycopersicum</i>)	-	+	No	
<i>Malus domestica</i>	<i>I/W</i>	<i>W</i>	+	+	No	
<i>Manihot esculenta</i>	*	-	-	-	No	

Seed plants (Spermatophyta)	Characteristics		Physical containment measures required			
Species/Genus	Pollination ¹	Presence in the Netherlands ²	Prevent wind pollination	Prevent insect pollination	Additional measures necessary for seeds and/or soil	Reason for additional containment measure for seed and/or soil
<i>Medicago truncatula</i>	SP/I	- (establishment cannot be excluded, no sexually compatible relatives)	-	+	Yes	Pods with thorns
<i>Medicago x varia</i>	I	W	-	+	No	
<i>Miscanthus floridulus</i>	W	G	+	-	Yes	Small seeds.
<i>Miscanthus giganteus</i>	W	W	+	-	Yes	Small seeds.
<i>Miscanthus lutarioriparius</i> (syn. <i>Miscanthus sacchariflorus</i> subsp. <i>lutarioriparius</i>)	W	- (establishment cannot be excluded; wild relatives present)	+	-	Yes	Small seeds. Prevent the spread of vegetative structures belowground in greenhouses with soil beds.
<i>Miscanthus sacchariflorus</i>	W	W	+	-	Yes	Small seeds. Prevent the spread of vegetative structures belowground in greenhouses with soil beds.
<i>Miscanthus sinensis</i>	W	W	+	-	Yes	Small seeds.
<i>Momordica balsamina</i>	I	-	-	-	No	
<i>Momordica charantia</i>	I	-	-	-	No	
<i>Momordica cochinchinensis</i>	I	-	-	-	No	
<i>Musa acuminata</i>	*	-	-	-	No	
<i>Neptunia amplexicaulis</i>	not relevant	-	-	-	No	
<i>Nicotiana benthamiana</i>	I	-	-	-	Yes	Small seeds.
<i>Nicotiana sylvestris</i>	I	W	-	+	Yes	Small seeds.
<i>Nicotiana tabacum</i>	I	W	-	+	Yes	Small seeds.
<i>Noccaea caerulescens</i> (syn. <i>Thlaspi caerulescens</i>)	SP/I	W	-	+	No	
<i>Noccaea perfoliata</i> (syn. <i>Microthlaspi perfoliatum</i>)	SP/I	W	-	+	No	

Seed plants (Spermatophyta)	Characteristics		Physical containment measures required			
Species/Genus	Pollination ¹	Presence in the Netherlands ²	Prevent wind pollination	Prevent insect pollination	Additional measures necessary for seeds and/or soil	Reason for additional containment measure for seed and/or soil
<i>Panicum virgatum</i>	<i>W</i>	<i>G/W</i>	+	-	Yes	Small seeds. Prevent the spread of vegetative structures belowground in greenhouses with soil beds.
<i>Oryza sativa</i>	<i>SP/W/I</i>	-	-	-	No	
<i>Parasponia andersonii</i>	<i>W/I</i>	-	-	-	No	
<i>Petunia hybrida</i>	<i>SP/I(B)</i>	<i>W</i>	-	+	Yes	Small seeds.
<i>Phalaenopsis amabilis</i>	<i>I</i>	-	-	-	No	
<i>Phaseolus vulgaris</i>	<i>I</i>	<i>W</i>	-	+	No	
<i>Phleum pratense</i>	<i>W</i>	<i>W</i>	+	-	Yes	Small seeds.
<i>Phlox paniculata</i>	<i>I</i>	<i>G</i>	-	+	No	
<i>Pilosella aurantiaca</i> (syn. <i>Hieracium aurantiacum</i>)	<i>I</i>	<i>W/G</i>	-	+	Yes	Small seed with pappus.
<i>Pilosella caespitosa</i> (syn. <i>Hieracium caespitosum</i>)	<i>SP/I</i>	<i>W</i>	-	+	Yes	Seeds with pappus.
<i>Pilosella officinarum</i> (syn. <i>Hieracium pilosella</i>)	<i>I</i>	<i>W/G</i>	-	+	Yes	Small seed with pappus.
<i>Pisum sativum</i>	<i>SP/I</i>	<i>W</i>	-	+	No	
<i>Poa pratensis</i>	<i>SP/A/W</i>	<i>W</i>	+	-	Yes	Small seeds.
<i>Poa trivialis</i>	<i>W</i>	<i>W</i>	+	-	Yes	Small seeds.
<i>Populus tomentosa</i>	<i>W</i>	<i>G</i>	+	-	Yes	Prevent the spread of vegetative structures belowground in greenhouses with soil beds.
<i>Populus trichocarpa</i>	<i>W</i>	<i>W</i>	+	-	Yes	Prevent the spread of vegetative structures belowground in greenhouses with soil beds.
<i>Pyrus communis</i> (= <i>P. domestica</i>)	<i>I/W</i>	<i>W</i>	+	+	No	
<i>Quercus robur</i>	<i>W/I</i>	<i>W</i>	+	+	No	
<i>Raphanus raphanistrum</i> subsp. <i>sativus</i> (syn. <i>Raphanus sativus</i>)	<i>SP/I</i>	<i>W</i>	-	+	No	

Seed plants (Spermatophyta)	Characteristics		Physical containment measures required			
Species/Genus	Pollination ¹	Presence in the Netherlands ²	Prevent wind pollination	Prevent insect pollination	Additional measures necessary for seeds and/or soil	Reason for additional containment measure for seed and/or soil
<i>Ribes nigrum</i>	SP/I	W	-	+	Yes	Prevent the spread of vegetative structures belowground in greenhouses with soil beds.
<i>Ribes rubrum</i>	SP/I	W	-	+	Yes	Prevent the spread of vegetative structures belowground in greenhouses with soil beds.
<i>Rorippa amphibia</i> (syn. <i>Nasturtium amphibium</i>)	I	W	-	+	Yes	Small seeds in siliqua which can burst open. Clonal distribution through rhizomes needs to be prevented.
<i>Rorippa islandica</i>	SP/I	- (wild relatives)	-	+	Yes	Small seeds in siliqua which can burst open.
<i>Rorippa palustris</i>	SP/I	W	-	+	Yes	Small seeds in siliqua which can burst open.
<i>Rorippa sylvestris</i> (syn. <i>Nasturtium sylvestre</i>)	I	W	-	+	Yes	Small seeds in siliqua which can burst open. Clonal distribution through rhizomes needs to be prevented.
<i>Rosa</i> cultivar groups (broken down): <i>Climbing floribunda</i> , <i>Climbing Grandiflora</i> , <i>Climbing Hybrid Tea</i> , <i>Climbing Miniature</i> , <i>Climbing Polyantha</i> , <i>Floribunda</i> , <i>Grandiflora</i> , <i>Hybrid Kordesii</i> , <i>Hybrid Moyesii</i> , <i>Hybrid Musk</i> , <i>Hybrid Rugosa</i> , <i>Hybrid Tea</i> , <i>Hybrid Wichurana</i> , <i>Large Flowered Climber</i> , <i>Miniature</i> , <i>Mini-Flora</i> , <i>Polyantha</i>	*	G	-	-	No	
<i>Rubus allegheniensis</i>	I/W	- (establishment cannot be excluded; wild and cultivated relatives present)	+	+	Yes	Prevent the spread of vegetative structures belowground in greenhouses with soil beds.

Seed plants (Spermatophyta)	Characteristics		Physical containment measures required			
	Species/Genus	Pollination ¹	Presence in the Netherlands ²	Prevent wind pollination	Prevent insect pollination	Additional measures necessary for seeds and/or soil
<i>Rumex palustris</i>	<i>W</i>	<i>W</i>	+	-	No	
<i>Saintpaulia ionantha</i>	*	-	-	-	No	
<i>Salix alba</i>	<i>I/W</i>	<i>W</i>	+ (for male inflorescences only)	+ (for male inflorescences only)	Yes (for plants with female inflorescences only)	Seeds with pappus.
<i>Salix babylonica</i> (syn. <i>Salix matsudana</i>)	<i>I/W</i>	<i>W</i>	+ (for male inflorescences only)	+ (for male inflorescences only)	Yes (for plants with female inflorescences only)	Seeds with pappus.
<i>Salpiglossis sinuata</i>	<i>I/SP</i>	<i>G</i>	-	+	No	
' <i>Sanvitalia speciosa</i> '	<i>I</i>	<i>G</i>	-	+	No	
<i>Scaevola aemula</i>	<i>I</i>	<i>G</i>	-	+	No	
<i>Schrenkiella parvula</i> (syn. <i>Thellungiella parvula</i> , <i>Eutrema parvulum</i>)	<i>SP/I</i>	-	-	-	Yes	Small seeds.
<i>Scutellaria baicalensis</i>	<i>I</i>	<i>G</i>	-	+	No	
<i>Solanum acaule</i>	<i>irrelevant</i>	-	-	-	No	
<i>Solanum agrimonifolium</i>	<i>irrelevant</i>	-	-	-	No	
<i>Solanum agroglossum</i>	<i>irrelevant</i>	-	-	-	No	
<i>Solanum ajanhuiri</i>	<i>irrelevant</i>	-	-	-	No	
<i>Solanum alandiae</i>	<i>irrelevant</i>	-	-	-	No	
<i>Solanum albicans</i>	<i>irrelevant</i>	-	-	-	No	
<i>Solanum albornozii</i>	<i>irrelevant</i>	-	-	-	No	
<i>Solanum andigena</i>	<i>irrelevant</i>	-	-	-	No	

Seed plants (Spermatophyta)	Characteristics		Physical containment measures required			
Species/Genus	Pollination ¹	Presence in the Netherlands ²	Prevent wind pollination	Prevent insect pollination	Additional measures necessary for seeds and/or soil	Reason for additional containment measure for seed and/or soil
<i>Solanum andreaeanum</i>	irrelevant	-	-	-	No	
<i>Solanum aracc-papa</i>	irrelevant	-	-	-	No	
<i>Solanum arnezii</i>	irrelevant	-	-	-	No	
<i>Solanum astleyi</i>	irrelevant	-	-	-	No	
<i>Solanum aviculare</i>	irrelevant	-	-	-	No	
<i>Solanum avilesii</i>	irrelevant	-	-	-	No	
<i>Solanum berthaultii</i>	irrelevant	-	-	-	No	
<i>Solanum boliviense</i>	irrelevant	-	-	-	No	
<i>Solanum brachistotrichum</i>	irrelevant	-	-	-	No	
<i>Solanum brachycarpum</i>	irrelevant	-	-	-	No	
<i>Solanum bukasovii</i>	irrelevant	-	-	-	No	
<i>Solanum bulbocastanum</i>	I/W	- (no sexually compatible relatives)	-	-	No	
<i>Solanum candolleianum</i>	irrelevant	-	-	-	No	
<i>Solanum cantense</i>	irrelevant	-	-	-	No	
<i>Solanum capsicibaccatum</i>	irrelevant	-	-	-	No	
<i>Solanum cardiophyllum</i>	irrelevant	-	-	-	No	
<i>Solanum chacoense</i>	irrelevant	-	-	-	No	
<i>Solanum cheesmaniae</i>	SP/I/W	- (sexually compatible relative of <i>S. lycopersicum</i>)	-	+	No	
<i>Solanum chilense</i>	I/W	-	-	+	No	

Seed plants (Spermatophyta)	Characteristics		Physical containment measures required			
Species/Genus	Pollination ¹	Presence in the Netherlands ²	Prevent wind pollination	Prevent insect pollination	Additional measures necessary for seeds and/or soil	Reason for additional containment measure for seed and/or soil
		(sexually compatible relative of <i>S. lycopersicum</i>)				
<i>Solanum chmielewskii</i>	SP/I/W	- (sexually compatible relative of <i>S. lycopersicum</i>)	-	+	No	
<i>Solanum chomatophilum</i>	irrelevant	-	-	-	No	
<i>Solanum circaefolium</i>	irrelevant	-	-	-	No	
<i>Solanum clarum</i>	irrelevant	-	-	-	No	
<i>Solanum colombianum</i>	irrelevant	-	-	-	No	
<i>Solanum commersonii</i>	irrelevant	-	-	-	No	
<i>Solanum demissum</i>	irrelevant	-	-	-	No	
<i>Solanum doddsii</i>	irrelevant	-	-	-	No	
<i>Solanum dulcamara</i>	SP/I/W	W	-	+	No	
<i>Solanum ehrenbergii</i>	irrelevant	-	-	-	No	
<i>Solanum etuberosum</i>	irrelevant	-	-	-	No	
<i>Solanum fendlerii</i>	irrelevant	-	-	-	No	
<i>Solanum fernandezianum</i>	irrelevant	-	-	-	No	
<i>Solanum fraxinifolium</i>	I/W	-	-	-	No	
<i>Solanum galapagense</i>	SP/I/W	- (sexually compatible relative of <i>S. lycopersicum</i>)	-	+	No	
<i>Solanum gandarillasii</i>	irrelevant	-	-	-	No	
<i>Solanum gourlayi</i>	irrelevant	-	-	-	No	
<i>Solanum guerrercense</i>	irrelevant	-	-	-	No	

Seed plants (Spermatophyta)	Characteristics		Physical containment measures required			
Species/Genus	Pollination ¹	Presence in the Netherlands ²	Prevent wind pollination	Prevent insect pollination	Additional measures necessary for seeds and/or soil	Reason for additional containment measure for seed and/or soil
<i>Solanum habrochaites</i>	<i>I/W</i>	- (sexually compatible relative of <i>S. lycopersicum</i>)	-	+	No	
<i>Solanum hawkesianum</i>	<i>irrelevant</i>	-	-	-	No	
<i>Solanum hjertingii</i>	<i>irrelevant</i>	-	-	-	No	
<i>Solanum hondelmannii</i>	<i>irrelevant</i>	-	-	-	No	
<i>Solanum hoopesii</i>	<i>irrelevant</i>	-	-	-	No	
<i>Solanum hougasii</i>	<i>irrelevant</i>	-	-	-	No	
<i>Solanum huancabambense</i>	<i>irrelevant</i>	-	-	-	No	
<i>Solanum immite</i>	<i>irrelevant</i>	-	-	-	No	
<i>Solanum incamayoense</i>	<i>irrelevant</i>	-	-	-	No	
<i>Solanum iopetalum</i>	<i>irrelevant</i>	-	-	-	No	
<i>Solanum jamesii</i>	<i>irrelevant</i>	-	-	-	No	
<i>Solanum kurtzianum</i>	<i>irrelevant</i>	-	-	-	No	
<i>Solanum leptophyes</i>	<i>irrelevant</i>	-	-	-	No	
<i>Solanum lesteri</i>	<i>irrelevant</i>	-	-	-	No	
<i>Solanum longiconicum</i>	<i>irrelevant</i>	-	-	-	No	
<i>Solanum lycopersicoides</i>	<i>irrelevant</i>	-	-	-	No	
<i>Solanum lycopersicum</i>	<i>SP/I/W</i>	<i>W</i>	-	+	No	
<i>Solanum marinasense</i>	<i>irrelevant</i>	-	-	-	No	
<i>Solanum megistacrolobum</i>	<i>irrelevant</i>	-	-	-	No	
<i>Solanum melongena</i>	<i>SP/I/W</i>	<i>G</i>	-	+	No	
<i>Solanum michoacanum</i>	<i>irrelevant</i>	-	-	-	No	

Seed plants (Spermatophyta)	Characteristics		Physical containment measures required			
Species/Genus	Pollination ¹	Presence in the Netherlands ²	Prevent wind pollination	Prevent insect pollination	Additional measures necessary for seeds and/or soil	Reason for additional containment measure for seed and/or soil
<i>Solanum microdontum</i>	irrelevant	-	-	-	No	
<i>Solanum mochiquense</i>	irrelevant	-	-	-	No	
<i>Solanum morelliforme</i>	irrelevant	-	-	-	No	
<i>Solanum moscopanum</i>	irrelevant	-	-	-	No	
<i>Solanum multiinterruptum</i>	irrelevant	-	-	-	No	
<i>Solanum muricatum</i>	SP/I/W	G	-	-	No	
<i>Solanum neocardenasii</i>	irrelevant	-	-	-	No	
<i>Solanum neorossii</i>	irrelevant	-	-	-	No	
<i>Solanum nigrum</i>	SP/I/W	W	-	+	No	
<i>Solanum okadae</i>	irrelevant	-	-	-	No	
<i>Solanum oplocense</i>	irrelevant	-	-	-	No	
<i>Solanum oxycarpum</i>	irrelevant	-	-	-	No	
<i>Solanum palustre</i>	irrelevant	-	-	-	No	
<i>Solanum pampasense</i>	irrelevant	-	-	-	No	
<i>Solanum papita</i>	irrelevant	-	-	-	No	
<i>Solanum paucissectum</i>	irrelevant	-	-	-	No	
<i>Solanum peruvianum</i>	I/W	- (sexually compatible relative of <i>S. lycopersicum</i>)	-	+	No	
<i>Solanum phureja</i>	irrelevant	-	-	-	No	
<i>Solanum pimpinellifolium</i>	SP/I/W	- (sexually compatible relative of <i>S. lycopersicum</i>)	-	+	No	

Seed plants (Spermatophyta)	Characteristics		Physical containment measures required			
Species/Genus	Pollination ¹	Presence in the Netherlands ²	Prevent wind pollination	Prevent insect pollination	Additional measures necessary for seeds and/or soil	Reason for additional containment measure for seed and/or soil
<i>Solanum pinnatisectum</i>	irrelevant	-	-	-	No	
<i>Solanum piurana</i>	irrelevant	-	-	-	No	
<i>Solanum polyadenium</i>	irrelevant	-	-	-	No	
<i>Solanum polytrichon</i>	irrelevant	-	-	-	No	
<i>Solanum raphanifolium</i>	irrelevant	-	-	-	No	
<i>Solanum ruiz-lealii</i>	irrelevant	-	-	-	No	
<i>Solanum sandemanii</i>	irrelevant	-	-	-	No	
<i>Solanum schenckii</i>	irrelevant	-	-	-	No	
<i>Solanum semidemissum</i>	irrelevant	-	-	-	No	
<i>Solanum sitiens</i>	irrelevant	-	-	-	No	
<i>Solanum sparsipilum</i>	irrelevant	-	-	-	No	
<i>Solanum spegazzinii</i>	irrelevant	-	-	-	No	
<i>Solanum stenotomum</i>	irrelevant	-	-	-	No	
<i>Solanum stoloniferum</i>	irrelevant	-	-	-	No	
<i>Solanum sucrense</i>	irrelevant	-	-	-	No	
<i>Solanum tarijense</i>	SP/I/W	-	-	-	No	
<i>Solanum tarnii</i>	irrelevant	-	-	-	No	
<i>Solanum trifolium</i>	irrelevant	-	-	-	No	
<i>Solanum tuberosum</i>	SP/I/W	W	-	-	No	
<i>Solanum venturii</i>	irrelevant	-	-	-	No	
<i>Solanum vernei</i>	irrelevant	-	-	-	No	
<i>Solanum verrucosum</i>	SP/I/W	-	-	-	No	

Seed plants (Spermatophyta)	Characteristics		Physical containment measures required			
	Species/Genus	Pollination ¹	Presence in the Netherlands ²	Prevent wind pollination	Prevent insect pollination	Additional measures necessary for seeds and/or soil
<i>Solanum violaceum</i>	<i>SP/I/W</i>	-	-	+	No	
<i>Solanum virgultorum</i>	<i>irrelevant</i>	-	-	-	No	
<i>Solanum x blanco-galdosii</i>	<i>irrelevant</i>	-	-	-	No	
<i>Solanum x edinense</i>	<i>irrelevant</i>	-	-	-	No	
<i>Solanum x sambucinum</i>	<i>irrelevant</i>	-	-	-	No	
'Solidago hybride'	<i>I</i>	<i>G</i>	-	+	Yes	Small wind-dispersed seeds.
<i>Sorghum bicolor</i>	<i>SP/W</i>	<i>W</i>	+	-	No	
<i>Spinacia oleracea</i>	<i>W</i>	<i>W</i>	+	+	No	
<i>Spirodela polyrhiza</i>	<i>SP/I/W</i>	<i>W</i>	+	+	Yes	Duckweed: small seeds and (floating) reproductive plant structures.
<i>Spirodela punctata</i> (syn. <i>Landoltia punctata</i>)	<i>SP/I/W</i>	<i>W</i>	+	+	Yes	Duckweed: small seeds and (floating) reproductive plant structures.
<i>Stevia rebaudiana</i>	<i>I/W</i>	-	-	-	No	
'Sutera diffusa'	<i>I</i>	<i>W</i>	-	+	No	
<i>Tabernaemontana pandacaqui</i>	*	-	-	-	No	
<i>Tagetes erecta</i>	<i>I/SP</i>	<i>C/G</i>	-	+	Yes	Achenes with hooks.
<i>Tagetes patula</i>	<i>I/SP</i>	<i>C/G</i>	-	+	Yes	Achenes with hooks.
<i>Tanacetum cinerariifolium</i>	<i>I</i>	<i>G</i>	-	+	Yes	Loose seeds.
<i>Taraxacum campylodes</i> (syn. <i>Taraxacum officinale</i>)	<i>I/A</i>	<i>W</i>	-	+	Yes	Seeds with pappus.
<i>Taraxacum kok-saghyz</i>	<i>I/SP/W</i>	- (wild relatives)	-	+	Yes	Seeds with pappus.
<i>Theobroma cacao</i>	<i>I/SP</i>	-	-	-	No	
<i>Thlaspi arvense</i>	<i>SP/W/I</i>	<i>W</i>	+	+	No	

Seed plants (Spermatophyta)	Characteristics		Physical containment measures required			
	Species/Genus	Pollination ¹	Presence in the Netherlands ²	Prevent wind pollination	Prevent insect pollination	Additional measures necessary for seeds and/or soil
<i>Trema levigata</i>	<i>W/I</i>	-	-	-	No	
<i>Trema orientalis</i>	<i>SP/I/W</i>	-	-	-	No	
<i>Trema tomentosa</i>	<i>SP/I/W</i>	-	-	-	No	
<i>Trifolium repens</i>	<i>I</i>	<i>W</i>	-	+	Yes	Small seeds.
<i>Triticum aestivum</i>	<i>SP/W</i>	<i>W</i>	+	-	No	
<i>Triticum durum</i> (syn. <i>Triticum turgidum</i> subsp. <i>durum</i>)	<i>SP/W</i>	<i>C</i>	+	-	No	
<i>Tulipa gesneriana</i>	<i>I</i>	<i>C</i>	-	-	No	
<i>Vanilla planifolia</i>	<i>I</i>	<i>C(/G)</i>	-	-	No	
<i>Vicia faba</i>	<i>SP/I</i>	<i>W</i>	-	+	No	
<i>Vicia hirsuta</i>	<i>I</i>	<i>W</i>	-	+	Yes	Pod ejects seeds when ripe.
<i>Vigna unguiculata</i>	<i>SP/I</i>	<i>G</i>	-	+	No	
<i>Vitis vinifera</i>	<i>SP/I/W</i>	<i>W</i>	+	+	Yes	Vegetative reproduction possible through rhizomes. Prevent the spread of vegetative structures belowground in greenhouses with soil beds.
<i>Wolffia globosa</i>	<i>SP/I/W</i>	- (wild relatives)	+	+	Yes	Duckweed: small seeds and (floating) reproductive plant structures.
<i>Zea mays</i>	<i>W/SP</i>	<i>C/W</i>	-	-	No	

Ad 1) Pollination: A = apomictic, I = insect pollination, B = bird pollination, W = wind pollination, SP = self-pollination, * = no seeds can develop under Dutch conditions.

Ad 2) Presence in the Netherlands: W = (wild) included in the National Flora and Fauna Database: is commonly present in the Netherlands or is incidentally observed⁴, C = (cultivated) is cultivated in the Netherlands, G = (garden) grown in gardens, - = not found outdoors in the Netherlands.

4. Nationale Databank Flora en Fauna – Verspreidingsatlas. www.verspreidingsatlas.nl (visited: September 2023)

Table 2. Additional containment measures for plants which reproduce by means of spores, such as mosses and ferns (informally known as Cryptogamae).

Mosses and ferns (Cryptogamae)		Characteristics	Additional containment measures required
Family	Species	Presence in the Netherlands ¹	
<i>Funariaceae</i>	<i>Physcomitrella patens</i>	W	Measures to prevent the spread of spores and vegetative fragments.
<i>Marchantiaceae</i>	<i>Marchantia polymorpha</i>	W	Measures to prevent the spread of spores and gemmae.
<i>Pteridaceae</i>	<i>Ceratopteris richardii</i>	- (<i>establishment cannot be excluded</i>)	Measures to prevent the spread of spores.
<i>Salviniaceae</i>	<i>Azolla filiculoides</i>	W	Measures to prevent the spread of plants, stem fragments and generative reproductive structures (spore capsules, microspores, macrospores, diploid zygotes, etc.).

Ad 1) W = (wild) included in the National Flora and Fauna Database: is commonly present in the Netherlands or is incidentally observed⁵, - = not found outdoors in the Netherlands.

5. Nationale Databank Flora en Fauna – Verspreidingsatlas. www.verspreidingsatlas.nl (visited: September 2023)