

Overview of containment measures for genetically modified plants

Status December 2024 (CGM/241202-01)

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COGEM advice CGM/241202-01

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 2023 and December 2024.

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 the overview of apathogenic organisms other than viruses, bacteria, fungi or parasites, classified by COGEM.

1. Ministerie van Infrastructuur en Milieu. Regeling genetisch gemodificeerde organismen milieubeheer 2013. <https://wetten.overheid.nl/BWBR0035072/> [in Dutch]

Table 1a. Additional containment measures required for activities involving GM seed plants (Spermatophyta) under ‘contained use’ – taxonomic arrangement. Pollination: A = apomictic, I = insect pollination, B = bird pollination, W = wind pollination, SP = self-pollination, * = no seeds can develop under Dutch conditions, N.R. = the species is not found in the Netherlands and has no sexually compatible wild relatives here. Presence in the Netherlands: W = (wild) included in the National Flora and Fauna Database: is commonly present in the Netherlands or is incidentally observed², C = (cultivated) is cultivated in the Netherlands, G = (garden) grown in gardens, - = not found outdoors in the Netherlands.

Family	Species	Pollination	Presence in the Netherlands	Prevent wind pollination	Prevent insect pollination	Additional measures for seeds and/or soil	Reason for additional measures for seeds and/or soil	COGEM advice
Amaranthaceae	<i>Beta vulgaris</i>	W/I	W	+	+	No		CGM/160421-03
	<i>Chenopodium quinoa</i>	SP/I/W	W	+	+	Yes	Small seeds	CGM/200204-01
	<i>Gomphrena clausenii</i>	I	-	-	-	No		CGM/210120-02
	<i>Gomphrena elegans</i>	I	-	-	-	No		CGM/210120-02
	<i>Spinacia oleracea</i>	W	W	+	+	No		CGM/160421-03
Amaryllidaceae	<i>Allium ampeloprasum</i> (syn. <i>Allium porrum</i>)	I	W	-	+	Yes	Wind dispersal: seeds are 'ejected' by the plant	CGM/160421-03
	<i>Allium cepa</i>	I	W	-	+	Yes	Wind dispersal: seeds are 'ejected' by the plant	CGM/160421-03
	<i>Allium sativum</i>	I	C (sterile)	-	-	No		CGM/160421-03
Apiaceae	<i>Anthriscus sylvestris</i>	I	W	-	+	No		CGM/160421-03
	<i>Daucus carota</i>	I	W	-	+	Yes	Fruit has hooked thorns, small seeds	CGM/160421-03
	<i>Eryngium bourgatii</i>	I	G	-	+	No		CGM/200820-04
	<i>Eryngium planum</i>	I	W	-	+	No		CGM/200820-04
Apocynaceae	<i>Catharanthus roseus</i>	*	-	-	-	No		CGM/160421-03
	<i>Tabernaemontana pandacacui</i>	*	-	-	-	No		CGM/160421-03
Araceae	<i>Anthurium andraeanum</i>	I	-	-	-	No		CGM/160421-03
	<i>Lemna gibba</i>	SP/I/W	W	+	+	Yes	Duckweed: small seeds and (floating) reproductive plant structures (turions)	CGM/160421-03
	<i>Lemna minor</i>	SP/I/W	W	+	+	Yes	Duckweed: small seeds and (floating) reproductive plant structures (turions)	CGM/160421-03
	<i>Spirodela polyrhiza</i>	SP/I/W	W	+	+	Yes	Duckweed: small seeds and (floating) reproductive plant structures	CGM/160421-03

2. National Flora and Fauna Database. www.verspreidingsatlas.nl (visited: November 2024)

Family	Species	Pollination	Presence in the Netherlands	Prevent wind pollination	Prevent insect pollination	Additional measures for seeds and/or soil	Reason for additional measures for seeds and/or soil	COGEM advice
Araceae	<i>Spirodela punctata</i> (syn. <i>Landoltia punctata</i>)	SP/I/W	W	+	+	Yes	Duckweed: small seeds and (floating) reproductive plant structures	CGM/160421-03
	<i>Wolffia globosa</i>	SP/I/W	- (wild relatives)	+	+	Yes	Duckweed: small seeds and (floating) reproductive plant structures	CGM/160421-03
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	CGM/160912-01
	<i>Hyacinthus orientalis</i>	I	W	-	+	No		CGM/160421-03
Asteraceae (Compositae)	<i>Bidens ferulifolia</i>	I	G/W	-	+	No		CGM/160421-03
	'Brachyscome melanophora'	I	G	-	+	No		CGM/160421-03
	'Brachyscome multiflora'	I	G	-	+	No		CGM/160421-03
	<i>Chrysanthemum</i> × <i>morifolium</i> (syn. <i>Dendranthema</i> × <i>grandiflora</i>)	*	-	-	-	No		CGM/160421-03
	<i>Cichorium endivia</i>	I/SP	W	-	+	No		CGM/181122-04
	<i>Cichorium intybus</i>	I	W	-	+	No		CGM/181122-04
	<i>Emilia sonchifolia</i>	I/(SP)	G	-	-	No		CGM/230406-01
	<i>Gerbera jamesonii</i>	*	-	-	-	No		CGM/160421-03
	<i>Helianthus annuus</i>	SP/I	C/W	-	+	No		CGM/160421-03
	<i>Jacobaea vulgaris</i> subsp. <i>vulgaris</i>	I	W	-	+	Yes	Seeds with pappus	CGM/160421-03
	<i>Jacobaea vulgaris</i> subsp. <i>dunensis</i>	I	W	-	+	Yes	Seeds with pappus	CGM/160421-03
	<i>Lactuca saligna</i>	I	- (extinct native species with wild relatives)	-	+	Yes	Seeds with pappus	CGM/181122-04
	<i>Lactuca sativa</i>	I/SP	W	-	+	Yes	Seeds with pappus	CGM/181122-04
	<i>Lactuca serriola</i>	I	W	-	+	Yes	Seeds with pappus	CGM/181122-04
	<i>Pilosella aurantiaca</i> (syn. <i>Hieracium aurantiacum</i>)	I	W/G	-	+	Yes	Small seed with pappus	CGM/221227-01

Family	Species	Pollination	Presence in the Netherlands	Prevent wind pollination	Prevent insect pollination	Additional measures for seeds and/or soil	Reason for additional measures for seeds and/or soil	COGEM advice
Asteraceae (Compositae)	<i>Pilosella caespitosa</i> (syn. <i>Hieracium caespitosum</i>)	SP/I	W	-	+	Yes	Seeds with pappus	CGM/160421-03
	<i>Pilosella officinarum</i> (syn. <i>Hieracium pilosella</i>)	I	W/G	-	+	Yes	Small seeds with pappus	CGM/221227-01
	'Sanvitalia speciosa'	I	G	-	+	No		CGM/160421-03
	'Solidago hybride'	I	G	-	+	Yes	Small wind-dispersed seeds	CGM/160421-03
	<i>Stevia rebaudiana</i>	I/W	-	-	-	No		CGM/191015-01
	<i>Tagetes erecta</i>	I/SP	C/G	-	+	Yes	Achenes with hooks	CGM/161107-01
	<i>Tagetes patula</i>	I/SP	C/G	-	+	Yes	Achenes with hooks	CGM/161107-01
	<i>Tanacetum cinerariifolium</i>	I	G	-	+	Yes	Loose seeds	CGM/160421-03
	<i>Taraxacum campylodes</i> (syn. <i>Taraxacum officinale</i>)	I/A	W	-	+	Yes	Seeds with pappus	CGM/160421-03
	<i>Taraxacum kok-saghyz</i>	I/SP/W	- (wild relatives)	-	+	Yes	Seeds with pappus	CGM/160421-03
Begoniaceae	<i>Begonia grandis</i>	I	G	-	+	Yes	Small seeds	CGM/160421-03
Betulaceae	<i>Alnus glutinosa</i>	W	W	+	-	No		CGM/210120-01
Brassicaceae	<i>Aethionema arabicum</i>	SP(I)	-	-	-	Yes	Sticky seed with protrusions after imbibition	CGM/170419-01
	<i>Arabidopsis thaliana</i>	SP/I	W	-	+	Yes	Small seeds	CGM/160421-03
	<i>Biscutella laevigata</i>	I	-	-	-	No		CGM/240924-01
	<i>Boechera holboellii</i> (syn. <i>Arabis holboellii</i>)	A/SP/I	-	-	-	Yes	Pod that bursts open with small seeds	CGM/160421-03
	<i>Boechera stricta</i> (syn. <i>Arabis drummondii</i>)	A/SP/I	-	-	-	Yes	Pod that bursts open with small seeds	CGM/160421-03
	<i>Bornmuellera emarginata</i> (syn. <i>Leptoplax emarginata</i>)	I	-	-	-	No		CGM/230905-01
	<i>Bornmuellera tymphaea</i>	I	-	-	-	No		CGM/230905-02
	<i>Brassica napus</i>	SP/I/W	W	+	+	Yes	Small seeds that can be ejected. Asynchronous seed maturation	CGM/181122-04
	<i>Brassica oleracea</i>	I / W	W	+	+	Yes	Small seeds that can be ejected. Asynchronous seed maturation	CGM/181122-04
	<i>Brassica rapa</i>	I / W	W	+	+	Yes	Small seeds that can be ejected. Asynchronous seed maturation	CGM/181122-04
	<i>Camelina sativa</i>	SP/I	W	-	+	Yes	Small seeds that are ejected	CGM/160421-03
	<i>Cardamine flexuosa</i>	SP(I)	W	-	+	Yes	Capsules eject seed	CGM/170316-02

Family	Species	Pollination	Presence in the Netherlands	Prevent wind pollination	Prevent insect pollination	Additional measures for seeds and/or soil	Reason for additional measures for seeds and/or soil	COGEM advice
Brassicaceae	<i>Cardamine hirsuta</i>	SP/I	W	-	+	Yes	Capsules eject seed	CGM/170316-02
	<i>Crambe hispanica</i> subsp. <i>abyssinica</i> (syn. <i>Crambe abyssinica</i>)	SP/I	W	-	+	No		CGM/160421-03
	<i>Diplotaxis tenuifolia</i>	I/W	W	+	+	Yes	Fruit can burst open to allow seeds to drop onto the ground	CGM/160421-03
	<i>Draba alyssoides</i>	SP/I	- (wild relatives)	-	+	No		CGM/160421-03
	<i>Draba aretioides</i>	SP/I	- (wild relatives)	-	+	No		CGM/160421-03
	<i>Draba fladnizensis</i>	SP/I	- (wild relatives)	-	+	No		CGM/160421-03
	<i>Draba hookeri</i>	SP/I	- (wild relatives)	-	+	No		CGM/160421-03
	<i>Draba lactea</i>	SP/I	- (wild relatives)	-	+	No		CGM/160421-03
	<i>Draba muralis</i>	SP/I	W	-	+	Yes	Seeds held in capsule which can burst open.	CGM/160421-03
	<i>Draba nivalis</i>	SP/I	- (wild relatives)	-	+	No		CGM/160421-03
	<i>Draba steyermarkii</i>	SP/I	- (wild relatives)	-	+	No		CGM/160421-03
	<i>Draba subcapitata</i>	SP/I	- (wild relatives)	-	+	No		CGM/160421-03
	<i>Draba verna</i> (syn. <i>Erophila verna</i>)	SP/I	W	-	+	Yes	Small seeds	CGM/231009-01
	<i>Eutrema halophilum</i> (syn. <i>Thellungiella halophila</i>)	SP/I	-	-	-	Yes	Small seeds	CGM/160421-03
	<i>Hirschfeldia incana</i>	I/SP	W	-	+	Yes	Small, sticky and lightweight seeds in capsule that bursts open	CGM/180430-03
	<i>Noccaea caerulescens</i> (syn. <i>Thlaspi caerulescens</i>)	SP/I	W	-	+	No		CGM/211025-02
	<i>Noccaea perfoliata</i> (syn. <i>Microthlaspi perfoliatum</i>)	SP/I	W	-	+	No		CGM/201208-01
	<i>Raphanus raphanistrum</i> subsp. <i>sativus</i> (syn. <i>Raphanus sativus</i>)	SP/I	W	-	+	No		CGM/160421-03
	<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	CGM/181122-04
	<i>Rorippa islandica</i>	SP/I	- (wild relatives)	-	+	Yes	Small seeds in silique which can burst open	CGM/181122-04
	<i>Rorippa palustris</i>	SP/I	W	-	+	Yes	Small seeds in silique which can burst open	CGM/181122-04

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Brassicaceae	<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	CGM/181122-04
	<i>Schrenkiella parvula</i> (syn. <i>Thellungiella parvula</i> , <i>Eutrema parvulum</i>)	SP/I	-	-	-	Yes	Small seeds	CGM/180627-01
	<i>Stanleya pinnata</i>	I	-	-	-	No		CGM/240327-01
	<i>Thlaspi arvense</i>	SP/W/I	W	+	+	No		CGM/230221-01
Cannabaceae	<i>Cannabis sativa</i>	W/I	W	+ (for male inflorescences only)	+ (for male inflorescences only)	No		CGM/160421-03
	<i>Parasponia andersonii</i>	W/I	-	-	-	No		CGM/160421-03
	<i>Trema levigata</i>	W/I	-	-	-	No		CGM/210218-02
	<i>Trema orientalis</i>	SP/I/W	-	-	-	No		CGM/120507-01
	<i>Trema tomentosa</i>	SP/I/W	-	-	-	No		CGM/120507-01
Caryophyllaceae	<i>Dianthus caryophyllus</i>	I	G/C	-	-	No		CGM/181122-04
	<i>Gypsophila paniculata</i>	I	W	-	+	No		CGM/160421-03
Cleomaceae	<i>Cleome gynandra</i>	SP/I/W	-	-	-	No		CGM/170419-01
	<i>Cleome spinosa</i>	SP/I	G	-	-	No		CGM/160421-03
Convolvulaceae	<i>Ipomoea batatas</i>	I	C/G	-	-	No		CGM/220927-01
Crassulaceae	<i>Kalanchoe blossfeldiana</i>	SP/I/(B)	-	-	-	No		CGM/160421-03
Cucurbitaceae	<i>Citrullus lanatus</i> (syn. <i>Citrullus vulgaris</i>)	I	G	-	+ (for male inflorescences only)	No		CGM/160421-03
	<i>Cucumis melo</i>	I	W	-	+ (for male inflorescences only)	No		CGM/181122-04
	<i>Cucumis sativus</i>	I	W	-	+ (for male inflorescences only)	No		CGM/181122-04
	<i>Cucurbita pepo</i>	I	W	-	+ (for male inflorescences only)	No		CGM/181122-04

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Cucurbitaceae	<i>Ecballium elaterium</i>	I/SP	G	-	+	Yes	Seeds can be expelled explosively from the fruit when ripe	CGM/240923-01
	<i>Momordica balsamina</i>	I	-	-	-	No		CGM/160421-03
	<i>Momordica charantia</i>	I	-	-	-	No		CGM/160421-03
	<i>Momordica cochinchinensis</i>	I	-	-	-	No		CGM/160421-03
Euphorbiaceae	<i>Jatropha curcas</i>	I	-	-	-	No		CGM/160421-03
	<i>Manihot esculenta</i>	*	-	-	-	No		CGM/160421-03
Fabaceae (Leguminosae)	<i>Arachis hypogaea</i>	SP/I	G	-	-	No		CGM/220207-01
	<i>Arachis pinto</i>	I/SP	-	-	-	No		CGM/240722-02
	<i>Chamaecrista mimosoides</i>	N.R.	-	-	-	No		CGM/240220-01
	<i>Cicer arietinum</i>	SP/I	W	-	-	No		CGM/220112-01
	<i>Glycine max</i>	SP/I	C	-	-	No		CGM/160421-03
	<i>Lupinus albus</i>	SP/I	W/C/G	-	+	No		CGM/231127-02
	<i>Lotus corniculatus</i> (syn. <i>Lotus japonicus</i>)	I	W	-	+	Yes	Pod ejects seeds when ripe	CGM/160421-03
	<i>Medicago truncatula</i>	SP/I	- (establishment cannot be excluded, sexually compatible wild relatives present)	-	+	Yes	Pods with thorns	CGM/230531-01
	<i>Medicago x varia</i>	I	W	-	+	No		CGM/160421-03
	<i>Neptunia amplexicaulis</i>	N.R.	-	-	-	No		CGM/230504-01
	<i>Neptunia heliophila</i>	N.R.	-	-	-	No		CGM/240117-01
	<i>Phaseolus vulgaris</i>	I	W/C	-	+	No		CGM/181122-04
	<i>Pisum sativum</i>	SP/I	W/C	-	+	No		CGM/160421-03
	<i>Trifolium repens</i>	I	W	-	+	Yes	Small seeds	CGM/160421-03
	<i>Vicia faba</i>	SP/I	W/C	-	+	No		CGM/160421-03
	<i>Vicia hirsuta</i>	I	W	-	+	Yes	Pod ejects seeds when ripe	CGM/160421-03
	<i>Vigna unguiculata</i>	SP/I	G	-	+	No		CGM/160421-03
Fagaceae	<i>Castanea mollissima</i>	W/I	G	+	+	No		CGM/190205-01
	<i>Castanea sativa</i>	I/W	W	+	+	No		CGM/210120-01
	<i>Quercus robur</i>	W/I	W	+	+	No		CGM/160421-03
Gentianaceae	<i>Eustoma grandiflorum</i>	I/SP	- (commercial varieties)	-	+	No		CGM/200504-01

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Geraniaceae	<i>Geranium pyrenaicum</i>	I/SP	W	-	+	Yes	Achenes that can be ejected away from the plant	CGM/150518-01
	<i>Geranium robertianum</i>	I/SP	W	-	+	Yes	Achenes with fibrous threads that can be ejected	CGM/150518-01
Gesneriaceae	<i>Saintpaulia ionantha</i>	*	-	-	-	No		CGM/160421-03
Grossulariaceae	<i>Ribes nigrum</i>	SP/I	W	-	+	Yes	Prevent the spread of vegetative structures belowground in greenhouses with soil beds	CGM/200820-02
	<i>Ribes rubrum</i>	SP/I	W	-	+	Yes	Prevent the spread of vegetative structures belowground in greenhouses with soil beds	CGM/200820-02
Goodeniaceae	<i>Scaevola aemula</i>	I	G	-	+	No		CGM/160421-03
Hydrangeaceae	<i>Hydrangea macrophylla</i>	I	W/G	-	+	No		CGM/160421-03
Iridaceae	<i>Crocus sativus</i>	I (only by sexually compatible relative as pollen donor)	G	-	-	No		CGM/230927-01
Juglandaceae	<i>Juglans regia</i>	W	W	+	-	No		CGM/210120-01
Lamiaceae	<i>Scutellaria baicalensis</i>	I	G	-	+	No		CGM/160421-03
Liliaceae	<i>Lilium auratum</i>	I	C	-	-	No		CGM/181122-04
	<i>Lilium brownii</i>	I	C	-	-	No		CGM/181122-04
	<i>Lilium japonicum</i>	I	C	-	-	No		CGM/181122-04
	<i>Lilium longiflorum</i>	I	C	-	-	No		CGM/181122-04
	<i>Lilium nobilissimum</i>	I	C	-	-	No		CGM/181122-04
	<i>Lilium platyphyllum</i> (syn. <i>Lilium auratum</i> var. <i>platyphyllum</i>)	I	C	-	-	No		CGM/181122-04
	<i>Lilium rubellum</i>	I	C	-	-	No		CGM/181122-04
	<i>Lilium speciosum</i>	I	C	-	-	No		CGM/181122-04
	<i>Tulipa gesneriana</i>	I	C	-	-	No		CGM/181122-04
Linaceae	<i>Linum usitatissimum</i>	SP/I	W/C	-	+	No		CGM/160421-03
Linderniaceae	<i>Craterostigma plantagineum</i>	I	-	-	-	No		CGM/160421-03
Malvaceae	<i>Abelmoschus esculentus</i>	I	G/C	-	+	No		CGM/220927-02

Family	Species	Pollination	Presence in the Netherlands	Prevent wind pollination	Prevent insect pollination	Additional measures for seeds and/or soil	Reason for additional measures for seeds and/or soil	COGEM advice
Malvaceae	<i>Gossypium hirsutum</i>	I	-	-	+	No		CGM/160421-03
	<i>Theobroma cacao</i>	I/SP	-	-	-	No		CGM/160421-03
Marantaceae	<i>Calathea roseopicta</i>	I/SP	-	-	-	No		CGM/160421-03
Musaceae	<i>Musa acuminata</i>	*	-	-	-	No		CGM/181122-04
Nyctaginaceae	'Bougainvillea vera'	I	-	-	-	No		CGM/160421-03
Onagraceae	<i>Fuchsia hybrida</i>	I/(B)	G	-	+	No		CGM/160421-03
Orchidaceae	<i>Phalaenopsis amabilis</i>	I	-	-	-	No		CGM/200804-01
	<i>Phalaenopsis</i> spp.	I	-	-	-	No		CGM/240220-02
	<i>Vanilla planifolia</i>	I	C/(G)	-	-	No		CGM/221012-01
Plantaginaceae	<i>Antirrhinum majus</i>	I	W	-	+	No		CGM/160421-03
Poaceae	<i>Agrostis capillaris</i> (syn. <i>Agrostis tenuis</i>)	W	W	+	-	Yes	Small seeds	CGM/160421-03
	<i>Agrostis stolonifera</i>	W	W	+	-	Yes	Small seeds	CGM/160421-03
	<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	CGM/190327-01
	<i>Dactylis glomerata</i>	W	W	+	-	Yes	Small seeds	CGM/160421-03
	<i>Hordeum vulgare</i>	SP/W	W	+	-	No		CGM/160421-03
	<i>Miscanthus floridulus</i>	W	G	+	-	Yes	Small seeds	CGM/201127-01
	<i>Miscanthus giganteus</i>	W	W	+	-	Yes	Small seeds	CGM/201127-01
	<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	CGM/201127-01
	<i>Miscanthus sacchariflorus</i>	W	W	+	-	Yes	Small seeds. Prevent the spread of vegetative structures belowground in greenhouses with soil beds	CGM/201127-01
	<i>Miscanthus sinensis</i>	W	W	+	-	Yes	Small seeds	CGM/201127-01
	<i>Oryza sativa</i>	SP/W/I	-	-	-	No		CGM/160421-03
	<i>Panicum virgatum</i>	W	G/W	+	-	Yes	Small seeds. Prevent the spread of vegetative structures belowground in greenhouses with soil beds	CGM/220810-01
	<i>Phleum pratense</i>	W	W	+	-	Yes	Small seeds	CGM/160421-03
	<i>Poa pratensis</i>	SP/A/W	W	+	-	Yes	Small seeds	CGM/160421-03

Family	Species	Pollination	Presence in the Netherlands	Prevent wind pollination	Prevent insect pollination	Additional measures for seeds and/or soil	Reason for additional measures for seeds and/or soil	COGEM advice
Poaceae	<i>Poa trivialis</i>	W	W	+	-	Yes	Small seeds	CGM/160421-03
	<i>Setaria viridis</i>	SP/W	W	+	-	Yes	Small seeds in panicles with needle-like bristles with barbs	CGM/240722-02
	<i>Sorghum bicolor</i>	SP/W	W	+	-	No		CGM/190828-01
	<i>Triticum aestivum</i>	SP/W	W/C	+	-	No		CGM/160421-03
	<i>Triticum durum</i> (syn. <i>Triticum turgidum</i> subsp. <i>durum</i>)	SP/W	C	+	-	No		CGM/160421-03
	<i>Zea mays</i>	W/SP	C	-	-	No		CGM/160421-03
Polemoniaceae	<i>Phlox paniculata</i>	I	G/W	-	+	No		CGM/160421-03
Polygonaceae	<i>Rumex palustris</i>	W	W	+	-	No		CGM/160421-03
Portulacaceae	<i>Portulaca oleracea</i>	SP/I	W	-	+	Yes	Small seeds	CGM/240722-02
Primulaceae	<i>Cyclamen persicum</i>	I	- (related garden plants)	-	+	No		CGM/160421-03
Ranunculaceae	<i>Delphinium elatum</i> (syn. <i>Delphinium belladonna</i>)	I	G/C	-	+	No		CGM/160421-03
Rosaceae	<i>Fragaria vesca</i>	SP/I	W	-	+	No		CGM/181122-04
	<i>Fragaria x ananassa</i>	SP/I	W	-	+	No		CGM/181122-04
	<i>Malus domestica</i>	I/W	W	+	+	No		CGM/181122-04
	<i>Pyrus communis</i> (syn. <i>P. domestica</i>)	I/W	W	+	+	No		CGM/181122-04
	Rosa cultivargroups: 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		CGM/231009-01
	<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	CGM/221020-02

Family	Species	Pollination	Presence in the Netherlands	Prevent wind pollination	Prevent insect pollination	Additional measures for seeds and/or soil	Reason for additional measures for seeds and/or soil	COGEM advice
Salicaceae	<i>Populus tomentosa</i>	W	G	+	-	Yes	Prevent the spread of vegetative structures belowground in greenhouses with soil beds	CGM/210120-01
	<i>Populus trichocarpa</i>	W	W	+	-	Yes	Prevent the spread of vegetative structures belowground in greenhouses with soil beds	CGM/210120-01
	<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	CGM/160421-03
	<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	CGM/160421-03
Scrophulariaceae	'Sutera diffusa'	I	G	-	+	No		CGM/160421-03
Solanaceae	<i>Capsicum annuum</i>	I	W	-	+	No		CGM/160421-03
	<i>Capsicum baccatum</i>	SP/I	C/G	-	+	No		CGM/201008-01
	<i>Capsicum cardenasii</i>	I	- (wild relatives)	-	+	No		CGM/220209-01
	<i>Capsicum chacoense</i>	SP/I	- (wild relatives)	-	+	No		CGM/220209-01
	<i>Capsicum chinense</i>	SP/I	C	-	+	No		CGM/181204-01
	<i>Capsicum eximium</i>	SP/I	- (wild relatives)	-	+	No		CGM/220209-01
	<i>Capsicum frutescens</i>	SP/I	C/G	-	+	No		CGM/220209-01
	<i>Capsicum galapagoense</i>	SP/I	- (wild relatives)	-	+	No		CGM/220209-01
	<i>Capsicum pubescens</i>	SP/I	C/G	-	+	No		CGM/220209-01
	<i>Capsicum tovarii</i>	SP/I	- (wild relatives)	-	+	No		CGM/220209-01
	<i>Datura stramonium</i>	SP/I	W	-	+	No		CGM/230406-01
	<i>Nicotiana benthamiana</i>	I	-	-	-	Yes	Small seeds	CGM/181122-04
	<i>Nicotiana sylvestris</i>	I	W	-	+	Yes	Small seeds	CGM/181122-04
	<i>Nicotiana tabacum</i>	I	W	-	+	Yes	Small seeds	CGM/181122-04
	<i>Petunia hybrida</i>	SP/I(B)	W	-	+	Yes	Small seeds	CGM/160421-03
	<i>Physalis pubescens</i> (syn. <i>Physalis floridana</i>)	I/SP/W	- (wild relatives)	+	+	No		CGM/240918-02
	<i>Physalis grisea</i>	SP/I/W	W	+	+	No		CGM/240112-02

Family	Species	Pollination	Presence in the Netherlands	Prevent wind pollination	Prevent insect pollination	Additional measures for seeds and/or soil	Reason for additional measures for seeds and/or soil	COGEM advice
Solanaceae	<i>Salpiglossis sinuata</i>	I/SP	G	-	+	No		CGM/160421-03
	Solanum section Basarthrum							
	<i>Solanum fraxinifolium</i>	I/W	-	-	-	No		CGM/181122-04
	<i>Solanum muricatum</i>	SP/I/W	G	-	-	No		CGM/181122-04
	Solanum section Dulcamara							
	<i>Solanum dulcamara</i>	SP/I/W	W	-	+	No		CGM/160421-03
	Solanum section Etuberosum							
	<i>Solanum etuberosum</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum fernandezianum</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum palustre</i>	N.R.	-	-	-	No		CGM/181122-04
	Solanum section Herpystichum							
	<i>Solanum trifolium</i>	N.R.	-	-	-	No		CGM/181122-04
	Solanum section Lycopersicoides							
	<i>Solanum lycopersicoides</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum sitiens</i>	N.R.	-	-	-	No		CGM/181122-04
	Solanum section Lycopersicon							
	<i>Lycopersicon pennellii</i> (syn. <i>Solanum pennellii</i>)	SP/I/W	- (sexually compatible relative of <i>S. lycopersicum</i>)	-	+	No		CGM/160421-03
	<i>Solanum cheesmaniae</i>	SP/I/W	- (sexually compatible relative of <i>S. lycopersicum</i>)	-	+	No		CGM/181122-04
	<i>Solanum chilense</i>	I/W	- (sexually compatible relative of <i>S. lycopersicum</i>)	-	+	No		CGM/181122-04
	<i>Solanum chmielewskii</i>	SP/I/W	- (sexually compatible relative of <i>S. lycopersicum</i>)	-	+	No		CGM/160421-03
	<i>Solanum galapagense</i>	SP/I/W	- (sexually compatible relative of <i>S. lycopersicum</i>)	-	+	No		CGM/181122-04

Family	Species	Pollination	Presence in the Netherlands	Prevent wind pollination	Prevent insect pollination	Additional measures for seeds and/or soil	Reason for additional measures for seeds and/or soil	COGEM advice
Solanaceae	<i>Solanum habrochaites</i>	I/W	- (sexually compatible relative of <i>S. lycopersicum</i>)	-	+	No		CGM/160421-03
	<i>Solanum lycopersicum</i>	SP/I/W	W	-	+	No		CGM/160421-03
	<i>Solanum pimpinellifolium</i>	SP/I/W	- (sexually compatible relative of <i>S. lycopersicum</i>)	-	+	No		CGM/181122-04
	<i>Solanum peruvianum</i>	I/W	- (sexually compatible relative of <i>S. lycopersicum</i>)	-	+	No		CGM/160421-03
	<i>Solanum</i> section <i>Melongena</i>							
	<i>Solanum melongena</i>	SP/I/W	G	-	+	No		CGM/160421-03
	<i>Solanum violaceum</i>	SP/I/W	-	-	+	No		CGM/181122-04
	<i>Solanum</i> section <i>Petota</i>							
	<i>Solanum acaule</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum agrimonifolium</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum agroglossum</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum ajanhuiri</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum alandiae</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum albicans</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum albornozii</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum andigena</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum andreanum</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum aracc-papa</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum arnezii</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum astleyi</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum avilesii</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum berthaultii</i> (syn. <i>Solanum tarijense</i>)	SP/I/W	-	-	-	No		CGM/181122-04
	<i>Solanum boliviense</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum brachistotrichum</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum brachycarpum</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum bukasovii</i>	N.R.	-	-	-	No		CGM/181122-04

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Solanaceae	<i>Solanum bulbocastanum</i>	I/W	- (no wild relatives)	-	-	No		CGM/160421-03
	<i>Solanum candolleianum</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum cantense</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum capsicibaccatum</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum cardiophyllum</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum chacoense</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum chomatophilum</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum circaeifolium</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum clarum</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum colombianum</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum commersonii</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum demissum</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum doddsii</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum x edinense</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum ehrenbergii</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum fendlerii</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum gandarillasii</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum gourlayi</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum guerrercense</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum hawkesianum</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum hjertingii</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum hondelmannii</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum hoopesii</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum hougasii</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum huancabambense</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum immite</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum incamayoense</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum iopetalum</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum jamesii</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum kurtzianum</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum leptophyes</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum lesteri</i>	N.R.	-	-	-	No		CGM/181122-04

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Solanaceae	<i>Solanum longiconicum</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum marinasense</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum megistacrolobum</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum michoacanum</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum microdontum</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum mochiquense</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum morelliforme</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum moscopanum</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum multiinterruptum</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum neocardenasii</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum neorossii</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum okadae</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum oplocense</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum oxycarpum</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum pampasense</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum papita</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum paucisectum</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum phureja</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum pinnatisectum</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum piurana</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum polyadenium</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum polytrichon</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum raphanifolium</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum ruiz-lealii</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum x sambucinum</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum sandemanii</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum schenckii</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum semidemissum</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum sparsipilum</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum spigazzinii</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum stenotomum</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum stoloniferum</i>	N.R.	-	-	-	No		CGM/181122-04

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Solanaceae	<i>Solanum sucrense</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum tarnii</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum tuberosum</i>	SP/I/W	W	-	-	No		CGM/160421-03
	<i>Solanum venturii</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum vernei</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum verrucosum</i>	SP/I/W	-	-	-	No		CGM/160421-03
	<i>Solanum virgultorum</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum x blanco-galdosii</i>	N.R.	-	-	-	No		CGM/181122-04
	<i>Solanum</i> section <i>Solanum</i>							
	<i>Solanum nigrum</i>	SP/I/W	W	-	+	No		CGM/181122-04
	<i>Solanum</i> subgenus <i>Archaeosolanum</i>							
	<i>Solanum aviculare</i>	N.R.	-	-	-	No		CGM/181122-04
Theaceae	<i>Camellia sinensis</i>	I	C/G	-	+	No		CGM/241003-01
Vitaceae	<i>Vitis vinifera</i>	SP/I/W	W/C	+	+	Yes	Vegetative reproduction possible through rhizomes. Prevent the spread of vegetative structures belowground in greenhouses with soil beds	CGM/181122-04
Zingiberaceae	<i>Curcuma longa</i>	I	-	-	-	No		CGM/190603-02
	<i>Zingiber officinale</i>	N.R.	-	-	-	No		CGM/240320-01

Table 1b. Additional containment measures for activities involving GM seed plants (Spermatophyta) under ‘contained use’ – sorted on species name. Pollination: A = apomictic, I = insect pollination, B = bird pollination, W = wind pollination, SP = self-pollination, * = no seeds can develop under Dutch conditions, N.R.= the species is not found in the Netherlands and has no sexually compatible wild relatives here. Presence in the Netherlands: W = (wild) included in the National Flora and Fauna Database: is commonly present in the Netherlands or is incidentally observed², C = (cultivated) is cultivated in the Netherlands, G = (garden) grown in gardens, - = not found outdoors in the Netherlands.

Species	Pollination	Presence in the Netherlands	Prevent wind pollination	Prevent insect pollination	Additional measures for seeds and/or soil	Reason for additional measures for seeds and/or soil	COGEM advice
<i>Abelmoschus esculentus</i>	I	G/C	-	+	No		CGM/220927-02
<i>Aethionema arabicum</i>	SP(I)	-	-	-	Yes	Sticky seed with protrusions after imbibition	CGM/170419-01
<i>Agrostis capillaris</i> (syn. <i>Agrostis tenuis</i>)	W	W	+	-	Yes	Small seeds	CGM/160421-03
<i>Agrostis stolonifera</i>	W	W	+	-	Yes	Small seeds	CGM/160421-03
<i>Allium ampeloprasum</i> (syn. <i>Allium porrum</i>)	I	W	-	+	Yes	Wind dispersal: seeds are 'ejected' by the plant	CGM/160421-03
<i>Allium cepa</i>	I	W	-	+	Yes	Wind dispersal: seeds are 'ejected' by the plant	CGM/160421-03
<i>Allium sativum</i>	I	C (sterile)	-	-	No		CGM/160421-03
<i>Alnus glutinosa</i>	W	W	+	-	No		CGM/210120-01
<i>Anthriscus sylvestris</i>	I	W	-	+	No		CGM/160421-03
<i>Anthurium andraeanum</i>	I	-	-	-	No		CGM/160421-03
<i>Antirrhinum majus</i>	I	W	-	+	No		CGM/160421-03
<i>Arabidopsis thaliana</i>	SP/I	W	-	+	Yes	Small seeds	CGM/160421-03
<i>Arachis hypogaea</i>	SP/I	G	-	-	No		CGM/220207-01
<i>Arachis pintoi</i>	I/SP	-	-	-	No		CGM/240722-02
<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	CGM/160912-01
<i>Avena sativa</i>	SP/W	W	+	-	No		
<i>Begonia grandis</i>	I	G	-	+	Yes	Small seeds	CGM/160421-03
<i>Beta vulgaris</i>	W/I	W	+	+	No		CGM/160421-03
<i>Bidens ferulifolia</i>	I	G/W	-	+	No		CGM/160421-03
<i>Biscutella laevigata</i>	I	-	-	-	No		CGM/240924-01
<i>Boechea holboellii</i> (syn. <i>Arabis holboellii</i>)	A/SP/I	-	-	-	Yes	Pod that bursts open with small seeds	CGM/160421-03
<i>Boechea stricta</i> (syn. <i>Arabis drummondii</i>)	A/SP/I	-	-	-	Yes	Pod that bursts open with small seeds	CGM/160421-03
<i>Bornmuellera emarginata</i> (syn. <i>Leptoplax emarginata</i>)	I	-	-	-	No		CGM/230905-01
<i>Bornmuellera tymphaea</i>	I	-	-	-	No		CGM/230905-02
'Bougainvillea vera'	I	-	-	-	No		CGM/160421-03

Species	Pollination	Presence in the Netherlands	Prevent wind pollination	Prevent insect pollination	Additional measures for seeds and/or soil	Reason for additional measures for seeds and/or soil	COGEM advice
<i>Brachypodium distachyon</i>	SP/W	- (establishment cannot be excluded; wild relatives present)	+	-	Yes	Light seeds with awns	CGM/190327-01
'Brachyscome melanophora'	I	G	-	+	No		CGM/160421-03
'Brachyscome multiflora'	I	G	-	+	No		CGM/160421-03
<i>Brassica napus</i>	SP/I/W	W	+	+	Yes	Small seeds that can be ejected. Asynchronous seed maturation	CGM/181122-04
<i>Brassica oleracea</i>	I /W	W	+	+	Yes	Small seeds that can be ejected. Asynchronous seed maturation	CGM/181122-04
<i>Brassica rapa</i>	I /W	W	+	+	Yes	Small seeds that can be ejected. Asynchronous seed maturation	CGM/181122-04
<i>Calathea roseopicta</i>	I/SP	-	-	-	No		CGM/160421-03
<i>Camelina sativa</i>	SP/I	W	-	+	Yes	Small seeds that are ejected	CGM/160421-03
<i>Camellia sinensis</i>	I	C/G	-	+	No		CGM/241003-01
<i>Cannabis sativa</i>	W/I	W	+ (for male inflorescences only)	+ (for male inflorescences only)	No		CGM/160421-03
<i>Capsicum annuum</i>	I	W	-	+	No		CGM/160421-03
<i>Capsicum baccatum</i>	SP/I	C/G	-	+	No		CGM/201008-01
<i>Capsicum cardenasii</i>	I	- (wild relatives)	-	+	No		CGM/220209-01
<i>Capsicum chacoense</i>	SP/I	- (wild relatives)	-	+	No		CGM/220209-01
<i>Capsicum chinense</i>	SP/I	C	-	+	No		CGM/181204-01
<i>Capsicum eximium</i>	SP/I	- (wild relatives)	-	+	No		CGM/220209-01
<i>Capsicum frutescens</i>	SP/I	C/G	-	+	No		CGM/220209-01
<i>Capsicum galapagoense</i>	SP/I	- (wild relatives)	-	+	No		CGM/220209-01
<i>Capsicum tovarii</i>	SP/I	- (wild relatives)	-	+	No		CGM/220209-01
<i>Capsicum pubescens</i>	SP/I	C/G	-	+	No		CGM/220209-01
<i>Cardamine flexuosa</i>	SP(I)	W	-	+	Yes	Capsules eject seed	CGM/170316-02
<i>Cardamine hirsuta</i>	SP(I)	W	-	+	Yes	Capsules eject seed	CGM/170316-02
<i>Castanea mollissima</i>	W/I	G	+	+	No		CGM/190205-01
<i>Castanea sativa</i>	I/W	W	+	+	No		CGM/210120-01
<i>Catharanthus roseus</i>	*	-	-	-	No		CGM/160421-03
<i>Chamaecrista mimosoides</i>	N.R.	-	-	-	No		CGM/240220-01
<i>Chenopodium quinoa</i>	SP/I/W	W	+	+	Yes	Small seeds	CGM/200204-01
<i>Chrysanthemum</i> × <i>morifolium</i> (syn. <i>Dendranthema</i> × <i>grandiflora</i>)	*	-	-	-	No		CGM/160421-03

Species	Pollination	Presence in the Netherlands	Prevent wind pollination	Prevent insect pollination	Additional measures for seeds and/or soil	Reason for additional measures for seeds and/or soil	COGEM advice
<i>Cicer arietinum</i>	SP/I	W	-	-	No		CGM/220112-01
<i>Cichorium endivia</i>	I/SP	W	-	+	No		CGM/181122-04
<i>Cichorium intybus</i>	I	W	-	+	No		CGM/181122-04
<i>Citrullus lanatus</i> (syn. <i>Citrullus vulgaris</i>)	I	G	-	+ (for male inflorescences only)	No		CGM/160421-03
<i>Cleome gynandra</i>	SP/I/W	-	-	-	No		CGM/170419-01
<i>Cleome spinosa</i>	SP/I	G	-	-	No		CGM/160421-03
<i>Crambe hispanica</i> subsp. <i>abyssinica</i> (syn. <i>Crambe abyssinica</i>)	SP/I	W	-	+	No		CGM/160421-03
<i>Craterostigma plantagineum</i>	I	-	-	-	No		CGM/160421-03
<i>Crocus sativus</i>	I (only by sexually compatible relative as pollen donor)	G	-	-	No		CGM/230927-01
<i>Cucumis melo</i>	I	W	-	+ (for male inflorescences only)	No		CGM/181122-04
<i>Cucumis sativus</i>	I	W	-	+ (for male inflorescences only)	No		CGM/181122-04
<i>Cucurbita pepo</i>	I	W	-	+ (for male inflorescences only)	No		CGM/181122-04
<i>Curcuma longa</i>	I	-	-	-	No		CGM/190603-02
<i>Cyclamen persicum</i>	I	- (related garden plants)	-	+	No		CGM/160421-03
<i>Dactylis glomerata</i>	W	W	+	-	Yes	Small seeds	CGM/160421-03
<i>Datura stramonium</i>	SP/I	W	-	+	No		CGM/230406-01
<i>Daucus carota</i>	I	W	-	+	Yes	Fruit has hooked thorns, small seeds	CGM/160421-03
<i>Delphinium elatum</i> (syn. <i>Delphinium belladonna</i>)	I	G/C	-	+	No		CGM/160421-03
<i>Dianthus caryophyllus</i>	I	G/C	-	-	No		CGM/181122-04
<i>Diplotaxis tenuifolia</i>	I/W	W	+	+	Yes	Fruit can burst open to allow seeds to drop onto the ground	CGM/160421-03
<i>Draba alyssoides</i>	SP/I	- (wild relatives)	-	+	No		CGM/160421-03
<i>Draba aretioides</i>	SP/I	- (wild relatives)	-	+	No		CGM/160421-03

Species	Pollination	Presence in the Netherlands	Prevent wind pollination	Prevent insect pollination	Additional measures for seeds and/or soil	Reason for additional measures for seeds and/or soil	COGEM advice
<i>Draba fladnizensis</i>	SP/I	- (wild relatives)	-	+	No		CGM/160421-03
<i>Draba hookeri</i>	SP/I	- (wild relatives)	-	+	No		CGM/160421-03
<i>Draba lactea</i>	SP/I	- (wild relatives)	-	+	No		CGM/160421-03
<i>Draba muralis</i>	SP/I	W	-	+	Yes	Seeds held in capsule which can burst open.	CGM/160421-03
<i>Draba nivalis</i>	SP/I	- (wild relatives)	-	+	No		CGM/160421-03
<i>Draba steyermarkii</i>	SP/I	- (wild relatives)	-	+	No		CGM/160421-03
<i>Draba subcapitata</i>	SP/I	- (wild relatives)	-	+	No		CGM/160421-03
<i>Draba verna</i> (syn. <i>Erophila verna</i>)	SP/I	W	-	+	Yes	Small seeds	CGM/231009-01
<i>Ecballium elaterium</i>	I/SP	G	-	+	Yes	Seeds can be expelled explosively from the fruit when ripe	CGM/240923-01
<i>Emilia sonchifolia</i>	I/(SP)	G	-	-	No		CGM/230406-01
<i>Eryngium bourgatii</i>	I	G	-	+	No		CGM/200820-04
<i>Eryngium planum</i>	I	W	-	+	No		CGM/200820-04
<i>Eustoma grandiflorum</i>	I/SP	- (commercial varieties)	-	+	No		CGM/200504-01
<i>Eutrema halophilum</i> (syn. <i>Thellungiella halophila</i>)	SP/I	-	-	-	Yes	Small seeds	CGM/160421-03
<i>Fragaria vesca</i>	SP/I	W	-	+	No		CGM/181122-04
<i>Fragaria x ananassa</i>	SP/I	W	-	+	No		CGM/181122-04
<i>Fuchsia hybrida</i>	I/(B)	G	-	+	No		CGM/160421-03
<i>Geranium pyrenaicum</i>	I/SP	W	-	+	Yes	Achenes that can be ejected away from the plant	CGM/150518-01
<i>Geranium robertianum</i>	I/SP	W	-	+	Yes	Achenes with fibrous threads that can be ejected	CGM/150518-01
<i>Gerbera jamesonii</i>	*	-	-	-	No		CGM/160421-03
<i>Glycine max</i>	SP/I	C	-	-	No		CGM/160421-03
<i>Gomphrena claussenii</i>	I	-	-	-	No		CGM/210120-02
<i>Gomphrena elegans</i>	I	-	-	-	No		CGM/210120-02
<i>Gossypium hirsutum</i>	I	-	-	+	No		CGM/160421-03
<i>Gypsophila paniculata</i>	I	W	-	+	No		CGM/160421-03
<i>Helianthus annuus</i>	SP/I	C/W	-	+	No		CGM/160421-03
<i>Hirschfeldia incana</i>	I/SP	W	-	+	Yes	Small, sticky and lightweight seeds in capsule that bursts open	CGM/180430-03
<i>Hordeum vulgare</i>	SP/W	W	+	-	No		CGM/160421-03
<i>Hyacinthus orientalis</i>	I	W	-	+	No		CGM/160421-03

Species	Pollination	Presence in the Netherlands	Prevent wind pollination	Prevent insect pollination	Additional measures for seeds and/or soil	Reason for additional measures for seeds and/or soil	COGEM advice
<i>Hydrangea macrophylla</i>	I	W/G	-	+	No		CGM/160421-03
<i>Ipomoea batatas</i>	I	C/G	-	-	No		CGM/220927-01
<i>Jacobaea vulgaris</i> subsp. <i>dunensis</i>	I	W	-	+	Yes	Seeds with pappus	CGM/160421-03
<i>Jacobaea vulgaris</i> subsp. <i>vulgaris</i>	I	W	-	+	Yes	Seeds with pappus	CGM/160421-03
<i>Jatropha curcas</i>	I	-	-	-	No		CGM/160421-03
<i>Juglans regia</i>	W	W	+	-	No		CGM/210120-01
<i>Kalanchoe blossfeldiana</i>	SP/I(B)	-	-	-	No		CGM/160421-03
<i>Lactuca saligna</i>	I	- (extinct native species with wild relatives)	-	+	Yes	Seeds with pappus	CGM/181122-04
<i>Lactuca sativa</i>	I/SP	W	-	+	Yes	Seeds with pappus	CGM/181122-04
<i>Lactuca serriola</i>	I	W	-	+	Yes	Seeds with pappus	CGM/181122-04
<i>Lemna gibba</i>	SP/I/W	W	+	+	Yes	Duckweed: small seeds and (floating) reproductive plant structures (turions)	CGM/160421-03
<i>Lemna minor</i>	SP/I/W	W	+	+	Yes	Duckweed: small seeds and (floating) reproductive plant structures (turions)	CGM/160421-03
<i>Lilium auratum</i>	I	C	-	-	No		CGM/181122-04
<i>Lilium brownii</i>	I	C	-	-	No		CGM/181122-04
<i>Lilium japonicum</i>	I	C	-	-	No		CGM/181122-04
<i>Lilium longiflorum</i>	I	C	-	-	No		CGM/181122-04
<i>Lilium nobilissimum</i>	I	C	-	-	No		CGM/181122-04
<i>Lilium platyphyllum</i> (syn. <i>Lilium auratum</i> var. <i>platyphyllum</i>)	I	C	-	-	No		CGM/181122-04
<i>Lilium rubellum</i>	I	C	-	-	No		CGM/181122-04
<i>Lilium speciosum</i>	I	C	-	-	No		CGM/181122-04
<i>Linum usitatissimum</i>	SP/I	W/C	-	+	No		CGM/160421-03
<i>Lotus corniculatus</i> (syn. <i>Lotus japonicus</i>)	I	W	-	+	Yes	Pod ejects seeds when ripe	CGM/160421-03
<i>Lupinus albus</i>	SP/I	W/C/G	-	+	No		CGM/231127-02
<i>Lycopersicon pennellii</i> (syn. <i>Solanum pennellii</i>)	SP/I/W	- (sexually compatible relative of <i>S. lycopersicum</i>)	-	+	No		CGM/160421-03
<i>Malus domestica</i>	I/W	W	+	+	No		CGM/181122-04
<i>Manihot esculenta</i>	*	-	-	-	No		CGM/160421-03
<i>Medicago truncatula</i>	SP/I	- (establishment cannot be excluded,	-	+	Yes	Pods with thorns	CGM/230531-01

Species	Pollination	Presence in the Netherlands	Prevent wind pollination	Prevent insect pollination	Additional measures for seeds and/or soil	Reason for additional measures for seeds and/or soil	COGEM advice
		<i>sexually compatible wild relatives present)</i>					
<i>Medicago x varia</i>	I	W	-	+	No		CGM/160421-03
<i>Miscanthus floridulus</i>	W	G	+	-	Yes	Small seeds	CGM/201127-01
<i>Miscanthus giganteus</i>	W	W	+	-	Yes	Small seeds	CGM/201127-01
<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	CGM/201127-01
<i>Miscanthus sacchariflorus</i>	W	W	+	-	Yes	Small seeds. Prevent the spread of vegetative structures belowground in greenhouses with soil beds	CGM/201127-01
<i>Miscanthus sinensis</i>	W	W	+	-	Yes	Small seeds	CGM/201127-01
<i>Momordica balsamina</i>	I	-	-	-	No		CGM/160421-03
<i>Momordica charantia</i>	I	-	-	-	No		CGM/160421-03
<i>Momordica cochinchinensis</i>	I	-	-	-	No		CGM/160421-03
<i>Musa acuminata</i>	*	-	-	-	No		CGM/181122-04
<i>Neptunia amplexicaulis</i>	N.R.	-	-	-	No		CGM/230504-01
<i>Neptunia heliophila</i>	N.R.	-	-	-	No		CGM/240117-01
<i>Nicotiana benthamiana</i>	I	-	-	-	Yes	Small seeds	CGM/181122-04
<i>Nicotiana sylvestris</i>	I	W	-	+	Yes	Small seeds	CGM/181122-04
<i>Nicotiana tabacum</i>	I	W	-	+	Yes	Small seeds	CGM/181122-04
<i>Noccaea caerulea</i> (syn. <i>Thlaspi caerulea</i>)	SP/I	W	-	+	No		CGM/211025-02
<i>Noccaea perfoliata</i> (syn. <i>Microthlaspi perfoliatum</i>)	SP/I	W	-	+	No		CGM/201208-01
<i>Oryza sativa</i>	SP/W/I	-	-	-	No		CGM/160421-03
<i>Panicum virgatum</i>	W	G/W	+	-	Yes	Small seeds. Prevent the spread of vegetative structures belowground in greenhouses with soil beds	CGM/220810-01
<i>Parasponia andersonii</i>	W/I	-	-	-	No		CGM/160421-03
<i>Petunia hybrida</i>	SP/I/(B)	W	-	+	Yes	Small seeds	CGM/160421-03
<i>Phalaenopsis amabilis</i>	I	-	-	-	No		CGM/200804-01
<i>Phalaenopsis</i> spp.	I	-	-	-	No		CGM/240220-02
<i>Phaseolus vulgaris</i>	I	W/C	-	+	No		CGM/181122-04
<i>Phleum pratense</i>	W	W	+	-	Yes	Small seeds	CGM/160421-03

Species	Pollination	Presence in the Netherlands	Prevent wind pollination	Prevent insect pollination	Additional measures for seeds and/or soil	Reason for additional measures for seeds and/or soil	COGEM advice
<i>Phlox paniculata</i>	I	G/W	-	+	No		CGM/160421-03
<i>Physalis grisea</i>	SP/I/W	W	+	+	No		CGM/240112-02
<i>Physalis pubescens</i> (syn. <i>Physalis floridana</i>)	I/SP/W	- (wild relatives)	+	+	No		CGM/240918-02
<i>Pilosella aurantiaca</i> (syn. <i>Hieracium aurantiacum</i>)	I	W/G	-	+	Yes	Small seed with pappus	CGM/221227-01
<i>Pilosella caespitosa</i> (syn. <i>Hieracium caespitosum</i>)	SP/I	W	-	+	Yes	Seeds with pappus	CGM/160421-03
<i>Pilosella officinarum</i> (syn. <i>Hieracium pilosella</i>)	I	W/G	-	+	Yes	Small seeds with pappus	CGM/221227-01
<i>Pisum sativum</i>	SP/I	W/C	-	+	No		CGM/160421-03
<i>Poa pratensis</i>	SP/A/W	W	+	-	Yes	Small seeds	CGM/160421-03
<i>Poa trivialis</i>	W	W	+	-	Yes	Small seeds	CGM/160421-03
<i>Populus tomentosa</i>	W	G	+	-	Yes	Prevent the spread of vegetative structures belowground in greenhouses with soil beds	CGM/210120-01
<i>Populus trichocarpa</i>	W	W	+	-	Yes	Prevent the spread of vegetative structures belowground in greenhouses with soil beds	CGM/210120-01
<i>Portulaca oleracea</i>	SP/I	W	-	+	Yes	Small seeds	CGM/240722-02
<i>Pyrus communis</i> (syn. <i>P. domestica</i>)	I/W	W	+	+	No		CGM/181122-04
<i>Quercus robur</i>	W/I	W	+	+	No		CGM/160421-03
<i>Raphanus raphanistrum</i> subsp. <i>sativus</i> (syn. <i>Raphanus sativus</i>)	SP/I	W	-	+	No		CGM/160421-03
<i>Ribes nigrum</i>	SP/I	W	-	+	Yes	Prevent the spread of vegetative structures belowground in greenhouses with soil beds	CGM/200820-02
<i>Ribes rubrum</i>	SP/I	W	-	+	Yes	Prevent the spread of vegetative structures belowground in greenhouses with soil beds	CGM/200820-02
<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	CGM/181122-04
<i>Rorippa islandica</i>	SP/I	- (wild relatives)	-	+	Yes	Small seeds in silique which can burst open	CGM/181122-04
<i>Rorippa palustris</i>	SP/I	W	-	+	Yes	Small seeds in silique which can burst open	CGM/181122-04
<i>Rorippa sylvestris</i> (syn. <i>Nasturtium sylvestre</i>)	I	W	-	+	Yes	Small seeds in silique which can burst open. Clonal distribution through rhizomes needs to be prevented	CGM/181122-04
Rosa cultivargroups: Climbing floribunda, Climbing Grandiflora, Climbing Hybrid Tea, Climbing Miniature, Climbing Polyantha, Floribunda, Grandiflora, Hybrid Kordesii, Hybrid Moyesii, Hybrid Musk, Hybrid	*	G	-	-	No		CGM/231009-01

Species	Pollination	Presence in the Netherlands	Prevent wind pollination	Prevent insect pollination	Additional measures for seeds and/or soil	Reason for additional measures for seeds and/or soil	COGEM advice
Rugosa, Hybrid Tea, Hybrid Wichurana, Large Flowered Climber, Miniature, Mini-Flora, Polyantha							
<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	CGM/221020-02
<i>Rumex palustris</i>	W	W	+	-	No		CGM/160421-03
<i>Saintpaulia ionantha</i>	*	-	-	-	No		CGM/160421-03
<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	CGM/160421-03
<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	CGM/160421-03
<i>Salpiglossis sinuata</i>	I/SP	G	-	+	No		CGM/160421-03
'Sanvitalia speciosa'	I	G	-	+	No		CGM/160421-03
<i>Scaevola aemula</i>	I	G	-	+	No		CGM/160421-03
<i>Schrenkiella parvula</i> (syn. <i>Thellungiella parvula</i> , <i>Eutrema parvulum</i>)	SP/I	-	-	-	Yes	Small seeds	CGM/180627-01
<i>Scutellaria baicalensis</i>	I	G	-	+	No		CGM/160421-03
<i>Setaria viridis</i>	SP/W	W	+	-	Yes	Small seeds in panicles with needle-like bristles with barbs	CGM/240722-02
<i>Solanum acaule</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum agrimonifolium</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum agroglossum</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum ajanhuiri</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum alandiae</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum albicans</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum albornozi</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum andigena</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum andreanum</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum aracc-papa</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum arnezii</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum astleyi</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum aviculare</i>	N.R.	-	-	-	No		CGM/181122-04

Species	Pollination	Presence in the Netherlands	Prevent wind pollination	Prevent insect pollination	Additional measures for seeds and/or soil	Reason for additional measures for seeds and/or soil	COGEM advice
<i>Solanum avilesii</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum berthaultii</i> (syn. <i>Solanum tarijense</i>)	SP/I/W	-	-	-	No		CGM/181122-04
<i>Solanum boliviense</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum brachistotrichum</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum brachycarpum</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum bukasovii</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum bulbocastanum</i>	I/W	- (no wild relatives)	-	-	No		CGM/160421-03
<i>Solanum candolleianum</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum cantense</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum capsicibaccatum</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum cardiophyllum</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum chacoense</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum cheesmaniae</i>	SP/I/W	- (sexually compatible relative of <i>S. lycopersicum</i>)	-	+	No		CGM/181122-04
<i>Solanum chilense</i>	I/W	- (sexually compatible relative of <i>S. lycopersicum</i>)	-	+	No		CGM/181122-04
<i>Solanum chmielewskii</i>	SP/I/W	- (sexually compatible relative of <i>S. lycopersicum</i>)	-	+	No		CGM/160421-03
<i>Solanum chomatophilum</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum circaeifolium</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum clarum</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum colombianum</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum commersonii</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum demissum</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum doddsii</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum dulcamara</i>	SP/I/W	W	-	+	No		CGM/160421-03
<i>Solanum ehrenbergii</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum etuberosum</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum fendlerii</i>	N.R.	-	-	-	No		CGM/181122-04

Species	Pollination	Presence in the Netherlands	Prevent wind pollination	Prevent insect pollination	Additional measures for seeds and/or soil	Reason for additional measures for seeds and/or soil	COGEM advice
<i>Solanum fernandezianum</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum fraxinifolium</i>	I/W	-	-	-	No		CGM/181122-04
<i>Solanum galapagense</i>	SP/I/W	- (sexually compatible relative of <i>S. lycopersicum</i>)	-	+	No		CGM/181122-04
<i>Solanum gandarillasii</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum gourlayi</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum guerrercense</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum habrochaites</i>	I/W	- (sexually compatible relative of <i>S. lycopersicum</i>)	-	+	No		CGM/160421-03
<i>Solanum hawkesianum</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum hjertingii</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum hondelmannii</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum hoopesii</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum hougasii</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum huancabambense</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum immite</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum incamayoense</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum iopetalum</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum jamesii</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum kurtzianum</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum leptophyes</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum lesteri</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum longiconicum</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum lycopersicoides</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum lycopersicum</i>	SP/I/W	W	-	+	No		CGM/160421-03
<i>Solanum marinasense</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum megistacrolobum</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum melongena</i>	SP/I/W	G	-	+	No		CGM/160421-03
<i>Solanum michoacanum</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum microdontum</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum mochiquense</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum morelliforme</i>	N.R.	-	-	-	No		CGM/181122-04

Species	Pollination	Presence in the Netherlands	Prevent wind pollination	Prevent insect pollination	Additional measures for seeds and/or soil	Reason for additional measures for seeds and/or soil	COGEM advice
<i>Solanum moscopanum</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum multiinterruptum</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum muricatum</i>	SP/I/W	G	-	-	No		CGM/181122-04
<i>Solanum neocardenasii</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum neorossii</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum nigrum</i>	SP/I/W	W	-	+	No		CGM/181122-04
<i>Solanum okadae</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum oplocense</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum oxycarpum</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum palustre</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum pampasense</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum papita</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum paucissectum</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum peruvianum</i>	I/W	- (sexually compatible relative of <i>S. lycopersicum</i>)	-	+	No		CGM/160421-03
<i>Solanum phureja</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum pimpinellifolium</i>	SP/I/W	- (sexually compatible relative of <i>S. lycopersicum</i>)	-	+	No		CGM/181122-04
<i>Solanum pinnatisectum</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum piurana</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum polyadenium</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum polytrichon</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum raphanifolium</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum ruiz-lealii</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum sandemanii</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum schenckii</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum semidemissum</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum sitiens</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum sparsipilum</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum spegazzinii</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum stenotomum</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum stoloniferum</i>	N.R.	-	-	-	No		CGM/181122-04

Species	Pollination	Presence in the Netherlands	Prevent wind pollination	Prevent insect pollination	Additional measures for seeds and/or soil	Reason for additional measures for seeds and/or soil	COGEM advice
<i>Solanum sucrense</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum tarnii</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum trifolium</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum tuberosum</i>	SP/I/W	W	-	-	No		CGM/160421-03
<i>Solanum venturii</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum vernei</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum verrucosum</i>	SP/I/W	-	-	-	No		CGM/160421-03
<i>Solanum violaceum</i>	SP/I/W	-	-	+	No		CGM/181122-04
<i>Solanum virgultorum</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum x blanco-galdosii</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum x edinense</i>	N.R.	-	-	-	No		CGM/181122-04
<i>Solanum x sambucinum</i>	N.R.	-	-	-	No		CGM/181122-04
'Solidago hybride'	I	G	-	+	Yes	Small wind-dispersed seeds	CGM/160421-03
<i>Sorghum bicolor</i>	SP/W	W	+	-	No		CGM/190828-01
<i>Spinacia oleracea</i>	W	W	+	+	No		CGM/160421-03
<i>Spirodela polyrhiza</i>	SP/I/W	W	+	+	Yes	Duckweed: small seeds and (floating) reproductive plant structures	CGM/160421-03
<i>Spirodela punctata</i> (syn. <i>Landoltia punctata</i>)	SP/I/W	W	+	+	Yes	Duckweed: small seeds and (floating) reproductive plant structures	CGM/160421-03
<i>Stanleya pinnata</i>	I	-	-	-	No		CGM/240327-01
<i>Stevia rebaudiana</i>	I/W	-	-	-	No		CGM/191015-01
'Sutera diffusa'	I	G	-	+	No		CGM/160421-03
<i>Tabernaemontana pandacqui</i>	*	-	-	-	No		CGM/160421-03
<i>Tagetes erecta</i>	I/SP	C/G	-	+	Yes	Achenes with hooks	CGM/161107-01
<i>Tagetes patula</i>	I/SP	C/G	-	+	Yes	Achenes with hooks	CGM/161107-01
<i>Tanacetum cinerariifolium</i>	I	G	-	+	Yes	Loose seeds	CGM/160421-03
<i>Taraxacum campylodes</i> (syn. <i>Taraxacum officinale</i>)	I/A	W	-	+	Yes	Seeds with pappus	CGM/160421-03
<i>Taraxacum kok-saghyz</i>	I/SP/W	- (wild relatives)	-	+	Yes	Seeds with pappus	CGM/160421-03
<i>Theobroma cacao</i>	I/SP	-	-	-	No		CGM/160421-03
<i>Thlaspi arvense</i>	SP/W/I	W	+	+	No		CGM/230221-01
<i>Trema levigata</i>	W/I	-	-	-	No		CGM/210218-02
<i>Trema orientalis</i>	SP/I/W	-	-	-	No		CGM/120507-01
<i>Trema tomentosa</i>	SP/I/W	-	-	-	No		CGM/120507-01
<i>Trifolium repens</i>	I	W	-	+	Yes	Small seeds	CGM/160421-03

Species	Pollination	Presence in the Netherlands	Prevent wind pollination	Prevent insect pollination	Additional measures for seeds and/or soil	Reason for additional measures for seeds and/or soil	COGEM advice
<i>Triticum aestivum</i>	SP/W	W/C	+	-	No		CGM/160421-03
<i>Triticum durum</i> (syn. <i>Triticum turgidum</i> subsp. <i>durum</i>)	SP/W	C	+	-	No		CGM/160421-03
<i>Tulipa gesneriana</i>	I	C	-	-	No		CGM/181122-04
<i>Vanilla planifolia</i>	I	C(/G)	-	-	No		CGM/221012-01
<i>Vicia faba</i>	SP/I	W/C	-	+	No		CGM/160421-03
<i>Vicia hirsuta</i>	I	W	-	+	Yes	Pod ejects seeds when ripe	CGM/160421-03
<i>Vigna unguiculata</i>	SP/I	G	-	+	No		CGM/160421-03
<i>Vitis vinifera</i>	SP/I/W	W/C	+	+	Yes	Vegetative reproduction possible through rhizomes. Prevent the spread of vegetative structures belowground in greenhouses with soil beds	CGM/181122-04
<i>Wolffia globosa</i>	SP/I/W	- (wild relatives)	+	+	Yes	Duckweed: small seeds and (floating) reproductive plant structures	CGM/160421-03
<i>Zea mays</i>	W/SP	C	-	-	No		CGM/160421-03
<i>Zingiber officinale</i>	N.R.	-	-	-	No		CGM/240320-01

Table 2. Additional containment measures for plants which reproduce by means of spores, such as mosses and ferns (informally known as Cryptogamae). W = (wild) included in the National Flora and Fauna Database: is commonly present in the Netherlands or is incidentally observed², - = not found outdoors in the Netherlands.

Family	Species	Presence in the Netherlands	Additional containment measures required	COGEM advice
<i>Funariaceae</i>	<i>Physcomitrella patens</i>	W	Measures to prevent the spread of spores and vegetative fragments.	<u>CGM/140703-01</u>
<i>Marchantiaceae</i>	<i>Marchantia polymorpha</i>	W	Measures to prevent the spread of spores and gemmae.	<u>CGM/150930-01</u>
<i>Pteridaceae</i>	<i>Ceratopteris richardii</i>	- (establishment cannot be excluded)	Measures to prevent the spread of spores.	<u>CGM/210923-01</u>
<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.).	<u>CGM/200520-02</u>