

Composting invasive plant species

This guidance refers to controlled composting processes at home or on-site that result in the breakdown overtime of organic matter resulting in the production of compost. It does not apply to heaps of plant material left aside or to cold composting systems. For more information on the different types of composting, visit:

invasives.ie/downloads/compost-guide.pdf

Terrestrial Herbaceous Species

Species Name	Green vegetation e.g. leaves	Flowers	Seeds	Root, Bulb, Corm, Rhizome	Woody part of plant
Three-cornered garlic (<i>Allium triquetrum</i>)	✓	✓	✗	✗	–
Hottentot-fig (<i>Carpobrotus edulis</i>)	✗	✗	✗	✗	–
Montbretia (<i>Crocsmia X crocosmiiflora</i>)	✓*	✓	✓	✗	–
*Take care not to include corms that come up attached to green vegetation when pulled.					
Giant rhubarb species (<i>Gunnera species</i>)	✓	✗*	✗	✗	–
*Inflorescence readily decompose if cut before going to seed. Check for fruit development.					
Giant hogweed ⚠ (<i>Heracleum mantegazzianum</i>)	✓	✗	✗	✓*	–
⚠ Wear protective gear when handling all parts of this plant as phytotoxins in the plant may cause irritation or severe burning of body parts. *Root stock should be well broken-up before composting.					
Spanish bluebell and hybrid (<i>Hyacinthoides hispanica</i> and <i>Hyacinthoides X massartiana</i>)	✓	✓*	✗	✗	–
*Green vegetation and flowers should be mown or cut prior to going to seed, to be safely composted at home/on-site.					
Himalayan balsam (<i>Impatiens glandulifera</i>)	✓	✓	✗	✓	–
Green vegetation and flowers should be mown or cut/pulled prior to going to seed to be safely composted at home or on-site. Crushing stems and root stocks aids killing plants prior to composting.					
Broad-leaved rush (<i>Juncus planifolius</i>)	✓	✗	✗	✗	–
In practical terms it can be difficult to determine whether a flower has gone to fruit. If the plant is in flower, exclude it from home composting. Flowers are thus excluded.					
American skunk-cabbage ⚠ (<i>Lysichiton americanus</i>)	✓	✗	✗	✓*	–
⚠ Do not use home/on-site compost containing this species in wetland habitats. *Roots/rhizomes should be dried in advance of composting at home or container composted.					
Winter heliotrope (<i>Petasites pyrenaicus</i>)	✗	✗	–	✗	–
Invasive knotweeds (<i>Reynoutria japonica</i> , <i>Reynoutria sachalinensis</i> , <i>Reynoutria x bohémica</i> , <i>Koenigia polystachya</i>)	✗*	✗	✗	✗	–
*Dead standing winter canes, that have dried out entirely, can be left in-situ or composted.					

Key:

- ✗ Not suitable for composting
- ✓ Suitable for composting in an appropriate system
- Not applicable
- * Refer to notes and caveats provided

Home - Refers to domestic hot-composting systems greater than 1m³ that are well maintained, aerated and watered appropriately but excludes cold-composting heaps.

On-site - Refers to those large-scale composting heaps used by land managers to manage large volumes of biomass e.g. in parks and public gardens, golf courses or farms. These should be regularly aerated and watered appropriately to ensure hot temperatures.

Trees & Shrubs

Species Name	Green vegetation e.g. leaves	Flowers	Seeds	Root, Bulb, Corm, Rhizome	Woody part of plant
Tree-of-heaven (<i>Ailanthus altissima</i>)	✓	✓	✗	✗	✓*
*Chip woody material before composting.					
Butterfly bush (<i>Buddleja davidii</i>)	✓*	✓	✗	✗	✓*
*Drying and shredding of shoots/branches in advance of composting reduces regenerative ability.					
Sea buckthorn (<i>Hippophae rhamnoides</i>)	✗*	✗*	✗	✗	✗
*While leaves and flowers are non-regenerative it is highly unlikely that in practice they would be separated from the rest of the thorny plant prior to composting.					
Himalayan honeysuckle (<i>Leycesteria formosa</i>)	✗	✗	✗	✗	✗
Cherry laurel (<i>Prunus laurocerus</i>)	✓	✓	✓*	✓*	✓
*Desiccated and finely chipped rootstock and woody material may be composted.					
Rhododendron ⚠ (<i>Rhododendron ponticum</i> , including <i>Rhododendron x superponticum</i>)	✓	✓	✗	✓*	✓*
⚠ Care must be taken to avoid associated risks of plant pathogens (e.g. <i>Phytophthora</i>) which, if present, may not be sanitised in home/on-site settings. *Desiccated and finely chipped rootstock and woody material may be composted.					
Salmonberry (<i>Rubus spectabilis</i>)	✗*	✗*	✗	✗	✗
*While leaves and flowers are not technically regenerative it is unlikely, in practise, that they would be separated from thorny stems.					

Aquatic Plants

All parts of these aquatic plants can be composted in home or on-site facilities. **Keep compost containing these species away from waterbodies.**

- ✓ **Nuttall's waterweed** (*Elodea nuttallii*)
- ✓ **New Zealand pigmyweed** (*Crassula helmsii*)
- ✓ **Canadian waterweed** (*Elodea canadensis*)

- ✓ **Floating pennywort** (*Hydrocotyle ranunculoides*)
- ✓ **Curly waterweed** (*Lagarosiphon major*)
- ✓ **Parrot's feather** (*Myriophyllum aquaticum*)
- ✓ **Fringed water-lily** (*Nymphoides peltata*)



Please note that it is essential that home/on-site compost systems containing invasive species biomass, are operated to ensure that they reach thermophilic temperatures (high temperatures, 55-70oC) with adequate turning, watering and retention times.