

## **Invasive and toxic plants**

### **TOXIC PLANTS**

Most plants have varying degrees of toxicity, even those that are sometimes used in home-made remedies, pharmacology and homeopathy in infinitely small doses. It all depends on the part of the plant (root, stem, leaves, flowers, fruit/seeds) and its use (handling, ingestion, maintenance).

There are a large number of allergenic or poisonous plants, that are kept in the garden because they have beautiful flowers (jimsonweed, foxglove, spurge), because they bear decorative fruit (spindle tree) or because they are edible when cooked (parsnips).

And just because birds eat certain berries that doesn't mean that we humans can do the same: if birds swallow the whole fruit, they excrete the poisonous seeds about 20 minutes later and, therefore, consume only the sometimes non-toxic pulp (example: the yew; the seed is poisonous, but you can make jelly out of the red pulp), while children would consume the whole fruit with the seed that is poisonous for them.

### **INVASIVE PLANTS**

Botanists and gardeners have always brought plants from elsewhere into their gardens that have acclimatised very well and like some wild plants that "invite themselves", they become "invasive". When a plant settles at the expense of a native plant, it becomes "invasive" and it is difficult, if not impossible, to eliminate it.

### **TOXIC AND INVASIVE PLANTS**

Sometimes plants are both poisonous AND invasive.

And then gardeners have to take precautions to avoid incidents. Identify the plant first and do not let the unknown plants grow in your beds or under small fruits.

If you discover the few common, simultaneously invasive and toxic ones described below in your garden: Do not throw them into the compost! Do not let them get seeds and sow again! Throw them away and put on gloves!

Very often their flowers are generous and their colours bright; they have original and decorative fruits; their flowers attract butterflies, bees and all kinds of

insects, but also the attention of children (or even adults who think they know the plant) who may confuse them in nature or in the garden with small edible fruit. The list of intrusive/invasive plants, that are a little allergenic and of toxic plants that cause mild digestive disorders, including cramps, cardiovascular problems, coma and death, is long. In case of swallowing and if in doubt, do not hesitate to call the poison centre nearby.

**Here are two wild plants that are best not used in the garden:**

**The BITTERSWEET NIGHTSHADE** ‘*Solanum dulcamara*’, also called bittersweet or liquorice of the witches. From the Solanaceae family such as potatoes and tomatoes, it is a wild hedge plant with woody stems that sometimes invites itself into your garden, clinging to the fence or to shrubs. Since the plant blooms for a very long time, we can see the whole evolution of the plant at the same time: Lots of small purple flowers, hanging grapes of oval, smooth and green berries and bright red berries when ripe, which become wrinkled at the end of the season.



As so often, the green berries are more poisonous than the ripe berries. With its multitude of berries, it is a plant that should not be allowed to reproduce in the garden.

Like the kermes berry and many berry plants, the bittersweet or red nightshade is endozoochorous: its seeds are distributed by birds after passing through their intestinal tract.

**The fruits are rich in alkaloids and poisonous:** abdominal pain, nausea, vomiting, cramps, diarrhoea. For a child, a few berries can cause cramps or even a coma.

**THE BYRONY** '*Bryonia cretica* ssp *dioica*' - "Devil's turnip", "Snake"  
Perennial herbaceous plant from the pumpkin family, climbing plant, in gardens and towns, on fallow land, dioecious (female and male flowers on various plants). Its many stems, with very dark green leaves, grow up to six metres high and can hold on to very special tendrils, which initially seek hanging support by wrapping, and when they find it, the twists wind ten times in one direction and



ten times in the other (an exception in nature), ensuring that the hanging power increases. Its root is a melon-sized tuber. Pretty small, greenish-white and hairy flowers precede clusters of smooth, spherical berries that are light red when ripe.

**Very toxic poisonous plant:** Gloves are essential to handle

all parts of the plant, allergenic or toxic. Skin contact can cause dermatitis; berry ingestion causes vomiting, diarrhoea, delirium and cramps, convulsions, hypothermia and coma. Children can confuse ripe bryony berries with currants; the lethal dose is about ten fruits.

**An invasive and toxic plant so decorative that there is a great temptation to keep it:**

**The AMERICAN RICH**, '*Phytolacca americana*' or 'American Grape' - also called 'cayenne spinach', 'varnished grass', 'dyer'. A perennial herbaceous plant of the Phytolaccaceae family, native to North America and introduced to France in the 1990s. They are perennials that can grow three to four meters high with long, thick but hollow stems, ranging from pink to purple; their long, semi-evergreens are pale green, and their clusters of bright white or pink flowers are followed by fleshy berries of bright green, which turn bright black-violet after maturity.



It is very productive, but at the same time **obtrusive, invasive and toxic**: its root rotates (like the carrot) and sinks very deeply; it needs spade and pickaxe to extract the impressive trunk. It spread throughout France and uprooting campaigns had to be organised (Fontainebleau and Landes forests) because it eliminated all plants except blackberry bushes and ferns in its surroundings.

The berries are toxic and fatal to humans (vomiting, hypothermia, cyanosis), the leaves are toxic to pets, even earthworms and snails.

**A poisonous shrub that must not be placed in the garden:**

**THE CASTOR BEAN/CASTOR OIL PLANT** 'Ricinus communis' - It is a beautiful shrub of tropical origin (Africa) of the Euphorbiaceae family, cultivated in hot countries to collect the oil. Here it is often used in the middle of a massif or isolated, because of its decorative aspect with its large green or purple palm leaves; its fruit in groups of prickly, raspberry-coloured spheres contain large, light-coloured seeds, marbled brown and red, which are newly sown again by themselves.



Decorative, but oh so poisonous! **The whole plant is poisonous**; it contains ricin, a poison 6,000 times **more poisonous than cyanide** and 12,000 times more poisonous than rattlesnake poison. Castor oil is not recommended for our gardens as it is toxic to hedgehogs, it even kills cats and dogs and 3 seeds are deadly to children. If you have to pull it out, **put on gloves!**

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