

The plant

All the many members of the genus Amaranthus are edible, although some are better than others. They have been cultivated in all parts of the world and go under many names. Amaranth can be grown both for the leaves or the grains and are still commonly cultivated as a cereal in parts of Central and South America. Plants from these regions have shown remarkable adaptation to a wide range of climates from the lowland tropics to cold conditions. This adaptation can be put down partly to their promiscuous nature as they hybridise readily, and this makes defining the



number of species difficult. They are also a Amaranth leaves ready for harvesting reasonably common weed in the UK, especially on the lighter soils in East Anglia.

Growing amaranth:

Minimum germination temperature is around 13C, but best results are at 15-18 degrees – if you can't hold this temperature for your growing conditions just sow a little thicker or later in the year. Plants like a warm open site best, with good drainage and full sun, but will stand quite a bit of exposure. Water transplants in well, and if needed repeat until established. When growing for leaf only, broadcast the seeds in mid to late May, repeat in June and July. If you want to grow for grain production, or have limited amounts of seeds, start off plants indoors in large modules sown during late April, slowly harden off and plant out around the second week in June - anytime when you would normally plant out bedding plants such as petunias or Pelargoniums will be fine. They don't get many pests or diseases, except the ubiquitous slugs.

Harvesting is simplicity itself....For leaf production, pick off leaves or young shoots as soon as they are large enough to handle. Keep pinching back any flowerbuds to keep the plant

producing more leaves: eventually it will bolt regardless, but don't worry, you can collect a second crop of seeds.

To collect seeds, only use a few leaves from each plant for cooking to give highest yields. Shake the spikes on a warm dry day to see if the grains are ready to drop (usually from early September onwards). Select a warm dry day. Line an old tomato box with newspaper. Cut off the fruiting stalks and lie them in the box, then set the box in a warm place to dry, turning the stalks occasionally – the garage or inside a shed is fine, but watch out for mice. The seeds will fall out onto the newspaper and can be collected into a large jar or stout bag when fully dried. Use home collected grain within 6 months for human consumption.



Amaranth seedlings

Cooking and preparing Amaranth

Leaves

Amaranthus leaves, eaten young (lightly boiled, with a knob of butter added) are similar to spinach. They readily regenerate if watered, and the young growth can be cropped at fortnightly intervals during summer. Red leaved cultivars turn a rather mournful deep mauve when cooked, but if the cooking liquid is saved to cook rice it will turn it a glorious claret-purple colour.

Seeds

Amaranth's shiny round seeds (which always remind me of fleas – each is about the same size as a fat flea!) are also edible. They are high in protein and free of gluten, so are suitable for sufferers from coeliac disease or wheat intolerance.

Although technically a seed, not a true grain, they are produced in such quantity and cook so readily that I find it much simpler to think of them as a grain.

The snag in the seeds is their saponin content,



Amaranth producing seed

which needs to be washed out before they can be eaten: at least, for home collected seed, as bought amaranth is usually ready prepared. Fortunately this is a simple process: take some dry seeds, a bowl of water and a fine mesh sieve, and put the seeds in the bowl. Half-fill the bowl with seeds, slosh them around, pour the water away using the sieve to catch any spare seeds and repeat at least five times, or until the water stops developing a slight frothiness on the surface. Traditionally amaranthus seed, being easy to digest, were used to feed convalescents or were the first meal given to people who had been fasting.

Alternatively, put the seeds in a large clean tea-towel or cotton handkerchief and rinse as above.

The seeds can be sprouted, made into popcorn, toasted, ground into flour (which can also be used as a nutritious thickening agent) or eaten as cereal. As no gluten is present, for recipes using yeast amaranth flour must be combined at the rate of I part in 4 of strong bread flour for best results. The seeds swell in cooking: care must be taken in preparing it that the correct quantity of liquid is used and that it's not overcooked. Boiling takes at most 20 minutes, or a little less, and if the result turns out gloopy rather than slightly sticky then you've either overcooked it or used too much liquid!

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This leaflet is produced as part of the Sowing New Seeds Project. This is a lottery funded initiative aiming to produce a resource of information on growing advice, experiences and seeds to promote growing of exotic produce in the UK

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