# Wild asparagus: a new crop

Asparagus acutifolius is well known in Europe's Mediterranean regions, like Slovenia, where it grows in the wild, but is almost completely unknown elsewhere. While people pick this wild asparagus, it is rarely grown as a field crop, despite the fact that demand significantly outstrips supply. The main reason lies in the fact that the seeds are very difficult to germinate.

BY MOJCA REHAR KLANČIČ

he idea of planting a production field with wild asparagus (Asparagus acutifolius) emerged many years ago. But it was soon realised that finding planting material would not be easy. Transplanting wild plants was not an option, so growing plants from seeds was the only way possible. Learning when, where and how to collect seeds in nature was no easy task, but the true challenge lay in figuring out how to break the seed dormancy.

In Slovenia, Mojca Rehar Klančič created a nursery to grow wild asparagus.



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#### Similar to growing green asparagus

Asparagus acutifolius grows wild in the Mediterranean regions of Europe, but has the ability to morphologically adjust to various growing conditions. When grown in well-draining soil, it can easily survive temperatures as low as -20°C without suffering any damage. We have tested them in different climates in our country (no cover or other winter protection

was used). The plants are extremely drought tolerant, but for higher yields, some form of irrigation is advisable. Water supply is most important in the period right after putting the plants into the soil. The plants will soon develop a very deep root system. The cultivation technology is very similar to that involved in growing green asparagus, with the difference that A. acutifolius **Edible young shoots** of wild asparagus are harvested in nature in the spring. In plantations, possible irrigation means higher yields.



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grows slower, but lives longer, remaining productive for many decades. In natural environments, the

> plants seem to live forever. Fertile, pH neutral or alkaline soil in a sunny or semishady position is ideal for reaching optimum productivity. But how many plants should we place per hectare, should we plant in one or two rows, how wide should the path between rows be? We have found the best solutions for all of these questions: Plant in two rows 40 cm apart, with an in-row distance between plants of 60 cm. If we need

at most 1.3 m for walking, at least 40 cm needs to be taken in account for plant growth (see sketch), and there should be approximately 16,000 plants per hectare. The first harvest can be expected three years after planting. The key is to pay attention to the diameter of the spears, which should be no less than 5 mm. The prickly branches are not an issue when picking the crop if long sleeves and gloves are worn. The spears are collected from both the male and female plants. The species is suitable for organic production, and as the wild plant is not affected by any serious pests or diseases, any plants grown from seeds collected in the wild will be healthy.

the flowers are light yellow and the seed coating is almost black when ripe.

#### In nature

Asparagus acutifolius grows in very poor soil, finding its way between rocks and other bushy vegetation. The first spears can be found in nature as early as February in sunny and sheltered locations. Main growth is expected in April or early May and ends in mid-June in colder, shady locations. The species is dioecious, i.e. each plant bears only male or only female flowers. There is a high degree of natural variability in the plant habitus, but all plants are prickly,



very intense and bitter taste.

Accompanied by different cover crops

Experiments have been conducted with different cover crops used to protect the soil and enable wal-



## king without worrying about mud. In the first year, an annual crop like phacelia is sown on the walking paths. This allows the weeds to be controlled and also provides some shade to help the young plants establish themselves in the new environment. The cover crop can be mulched during the growing season if necessary. Dead organic matter should be left on the soil as mulch during winter. In the third year, a dwarf variety of Trifolium repens can be sown on the walweeds and adds some nitrogen to the soil. As there worrying about mud. Aw

### Market and flavour

During years of research, Mojca Rehar Klančič has exchanged ideas with friends and colleagues about the culinary value and marketing potential of wild asparagus. Patricija Pirnat, Production Manager at KZ Agraria Koper (https://www.kz-agraria.si/o-nas), said: "We invest no energy in the marketing of wild asparagus, as it comes and goes from our warehouses very quickly. It is so popular that it is literally sold out as soon as it comes onto the market. We purchase shoots that are up to 20 cm long, tie them into bundles that are 5 cm in diameter and send them to customers. High-end restaurants

love them very much."Slavica Smrdel, master chef and author of many cookbooks, described the tastes and introduced us to some of her recipes: "Wild asparagus is a delicacy. It has a very intense and bitter taste, which is stronger than that of cultivated asparagus. The most famous and popular recipe with wild asparagus is "Frtalja". My favourite recipe with wild asparagus is to combine wild rocket salad, boiled wild asparagus, a hard-boiled egg, goat's cheese and olive oil."



In nature, they grow in hard-to-reach areas, between rocks & other vegetation.



king path between rows, and it will eventually cover tends to be a great deal of rain during harvest, a all the space between the plants. This aids in fighting thick Trifolium carpet allows pickers to walk without

Asparagus acutifolius is an evergreen perennial whose spring spears are highly prized.



Seeds collected in nature are very difficult to germinate, so the big challenge was how to break the seed dormancy.

