



Practical and economic implications of growing asparagus organically

Innovation

GROWING ASPARAGUS TO FILL THE HUNGRY GAP

Asparagus has a lot of potential in Wales due to it being a high-value commodity that sells well at the farm gate. It is also one of the few crops that can be harvested for consumption during 'the hungry gap period' from the end of April to June when few other crops are available in the UK.

Being a perennial vegetable, once established it can produce for eight years or more. Asparagus is usually planted as one year old dormant plants called crowns with new plantings taking two years to establish before you can start harvesting.

Although there is a great demand for asparagus, small scale farmers can find the crop daunting due to its expensive establishment costs and the long wait for first harvest. But the crop benefits from high value, freshness, low food miles and short supply chain markets that supermarkets are generally unable to compete with.

Overall, there is very limited published industry data on growing organic or conventional asparagus, therefore more information and data was needed to increase knowledge of asparagus farming here in Wales.

Fortunately, ADAS, an independent agricultural and environmental consultancy successfully secured funding from the European Innovation Partnership for Agricultural Productivity & Sustainability (EIP Wales) to look at the practical and economic implications of growing organic asparagus on a small-scale in Wales.



Working with two organic farms in Monmouthshire, Chris Creed from the ADAS Horticulture team was able to monitor outputs and benchmark organic asparagus from establishment through to the first main harvest. Assessing the viability of organic asparagus by providing a thorough understanding of the practical and financial requirements of growing the crop would assist the wider sector and future asparagus growers in Wales.

BENEFITS OF THE FUNDING

In 2018 £40,000 worth of funding was secured through the Welsh Government Rural Communities – Rural Development Programme 2014-2020, which was funded by the European Agricultural Fund for Rural Development and the Welsh Government.

This funding allowed EIP Wales, led by Menter a Busnes, to conduct a three year research project that included the planting of different varieties of asparagus crowns on two organic farms in Monmouthshire.

A total of 40,000 crowns were ordered for the two sites, which had a total of just under one hectare on each site, 22,000 crowns per hectare or 2.2 crowns/m².



In year one following planting in April, the emerging crop was monitored for percentage emergence, fern numbers and height. A sample of the asparagus was dug up in order to count bud clusters for an indication of potential yield. Moving onto year two, due to successful establishment a light pruning cut was made. Again, as with year one, a sample of bud clusters were counted to give an indication of potential yield.

In year three, light crops were taken to allow the yields of three grades to be taken (jumbo, medium, and spure). Ongoing data continued to be gathered on weed and pest incidence, performance and costs of management of the crop to enable the benchmarking to be carried out.

In the final year the crop was harvested following crop emergence in late April through to the 21st of June, the industry standard for stopping harvest to allow regeneration of the crowns. Both farms showed a good return on investment.



THE FUTURE'S BRIGHT...

With the EIP Wales funding ADAS was able to assist farmers practically on the ground, working closely with them and providing advice on how to successfully grow organic asparagus. With an abundance of asparagus the farms were able to supply local customers and the data gathered is now available to help farmers across Wales learn more about growing this desirable, spring vegetable.

"The funding secured from EIP Wales was crucial in the research needed to look into the viability of organic asparagus crops in South Wales. We were able to monitor outputs and benchmark organic asparagus growing from establishment through to first harvest. Assessing the viability of organic asparagus enabled us to gain a thorough understanding of the practical and financial requirements of growing the crop providing useful information for the wider sector.

"Asparagus is a crop with great potential in Wales, and it's very much in demand. It's a great tasting product and easy to cook. It's got huge potential at places like Square Farm in Monmouthshire that has a direct supply chain to its customers via its own farm shop.

"A lot of small scale producers may think twice about wanting to grow this crop, but with our help and the information gathered we can help them make practical decisions about their asparagus projects. Since beginning this project we have had a number of other farmers contact us from across Wales wanting to learn more about this crop."

Will John, environment food and farming consultant, ADAS