

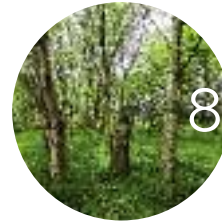
# The Horticulturist



## Plants are central to natural climate solutions

**PLUS** Field vegetables | YHoY Bursary Report | 40th Anniversary Reflections | Project Giving Back | CIH Conference

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## FROM THE PRESIDENT

This autumn has been a season of activity and optimism, marked by a series of events that have reaffirmed just how much there is to be positive about in the world of horticulture. I had the privilege of attending several inspiring gatherings, and I'm excited to share some of the highlights with you.

In October, we held our conference at the stunning Royal Botanic Gardens, Kew, and I want to extend a heartfelt thank you to our friends at Kew and everyone who attended, as well as to our speakers who made the day so engaging. The conference showcased not only the incredible horticultural solutions available to help tackle global challenges, but also the scope and depth of innovation happening within the industry. The breadth of topics covered was truly worth celebrating. In this issue of *The Horticulturist* you'll find more details on the sessions and discussions, and in the first issue of 2025, it is hoped that some of the papers will be published. Beyond the talks, the gardens provided the perfect venue and opportunity for networking, where attendees could connect, be guided in the gardens, and share ideas and contacts. If there's one thing that unites horticulturists, it's our generosity in giving time and knowledge to one another.

Kew also hosted the Royal Parks Guild Discovery Day, where over 200 attendees were inspired by a range of excellent talks. It was a day full of valuable insights and the chance to connect with others in the industry. The event not only showcased the career possibilities within horticulture but also captured a sense of ambition and excitement from the participants. A big thank you to all those involved in organising such a wonderful day – including perfect weather – and an atmosphere of genuine enthusiasm.

I was also fortunate to participate in a Q&A panel for the Young People in Horticulture Association at the Garden Museum. The discussion covered a broad spectrum of horticultural topics, and while I was the oldest person in the room, (62!), I again left feeling inspired and eager to continue learning. Thank you to the team for inviting me to be part of such an engaging conversation.

Most recently, I was in Edinburgh for Grow Careers Scotland held at the Royal Botanic Garden Edinburgh, where another group of passionate speakers shared valuable advice and encouragement with a full auditorium. During the event, we also had the privilege of celebrating the 40th anniversary of the Chartered Institute of Horticulture by planting a *Franklinia alatamaha* tree in the Botanic Gardens – a lasting symbol of the future growth of both the tree and the careers of everyone involved in these inspiring events.

As we move forward, I encourage you to be engaged, share your knowledge, and get involved with the Institute in whatever way you can. Together, we can continue to celebrate and support the incredible work being done in the horticultural world.

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Much of the content of *The Horticulturist* arises from voluntary contributions from members in the shape of ideas, articles and photographs. If you are interested in writing an article for the journal or have a newsworthy item please contact the Editor, Barbara Segall, at [barbara@bsegall.plus.com](mailto:barbara@bsegall.plus.com).

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**FOOD PRODUCTION** Driving the field vegetable industry forward are many factors. **Professor Geoff Dixon** sets them out and explains the shift from labour intensive to IT intensive systems.

# Field vegetables: opportunities and challenges

Progressive change is the hallmark of the field vegetable industry. Driving these businesses forward are market forces, consumer demands, company viability and scientific and technical discoveries and innovations (see Bleasdale, 1991, Aitken *et al* 2012, Dixon 2019 and Dixon & Wells 2024). Since the 1950s industry shape has moved from labour intensive market gardens to highly IT intensive industrialised businesses feeding a population of 60 million.

## **Social and economic value**

The aim now is providing consumers with fresh, attractive, health-promoting diets. Their importance for the UK economy and consumers is highlighted by the National Food Strategy (Dimbleby 2021) and the House of Lords Report

(2023). These enquiries identified the health and welfare value, contribution to national food security and gross domestic product (GDP) of the vegetable and salads industry. Diets rich in vegetables promote mental and physical well-being and combat the diseases of affluence such as cancers, coronary failures, diabetes and strokes (Mazza, 2004; Terry 2011). Drivers of innovation influence all aspects of a complex industry. This article discusses: plant breeding, nutrition, biological control and automation.

## **Climate change**

Climate change is bringing the four evils of: heat, cold, flooding and drought into sharp focus. The result is unpredictable crop seasonality, impaired yield and quality and the arrival of more

damaging and diverse pests, pathogens and stresses (Dixon *et al* 2014). Each adversely affect the continuity and consistency of fresh produce going into the supply chains reducing business productivity and resulting in shortages in supermarkets. For example, the long dry summer of 2022 has been associated with doubling of meristems in bulb onions. Growers therefore have strong business, social, environmental and personal reasons for working towards net zero carbon before 2040.

## **Plant breeding**

Mendel's Laws of Inheritance, rediscovered in the 1900s, brought scientific rigour into practical plant breeding. Previously, selections of improved vegetable strains came *ad hoc* from growers and