



# Tidying up our science

Columnist Mary Keen on the importance of science for gardeners, whatever your interests

Above: Detail from an 1879 chromolithograph of tomatoes by Ernst Benary (1819-1893), held by the RHS Lindley Library.

Here we are in the age of science and, with the announcement of a push 'to create a world-class scientific research centre for the benefit of all gardeners and the environment', our own RHS is about to become a major player. And here I am, like (I suspect) many members of a certain age, grappling with 'why science matters'.

British writer CP Snow (1905-1980) spoke in the 1960s of 'the Two Cultures', that 'incomprehension tinged with hostility' towards science once attributed to intellectuals educated only in the humanities. These days, society may have moved on, but many of my generation remain puzzled by science. We just don't get it.

I am a completely unscientific gardener of the muck, mystery and ask-everyone-else school of gardening. Even Brian Cox's experiments conducted by celebrities leave me bewildered. So I went to RHS Garden Wisley to talk about my shortcomings with Roger Williams, the RHS Head of Science.

Roger was patient and I came away with a better idea of why the RHS needs to lead research for gardeners. In the wider world, Roger says, there is plenty of work being done into the genetic code and other important topics, but it leaves less time and money for horticultural research. Research at the Royal Botanic Gardens, Kew is more slanted towards wild plants than cultivated ones. Government cuts mean that many universities have had to reduce research budgets (some, like Reading, send several PhD students to work at Wisley).

Roger believes it is important for his team to engage in areas of biological science that can deliver the answers gardeners like us need. These include taxonomy, of course, even though non-scientists moan that plant names change too often. Roger says firmly that we would be 'in a bit of a mess if we didn't know exactly what was what'. (Clearly scientists have tidier minds than most of us.)

What else? Identifying pests also comes high on the list (but not developing chemical methods of control, as that is too expensive). One area that might be explored is the gardener's tolerance of pests. Can we be persuaded to live with a few pests and also to change, for example, our traditional sowing dates of brassicas in order to beat cabbage whites, or of rocket to beat flea beetle? Will we be prepared to pick larvae from plants rather than spray them? And will that be enough? Current RHS research continues into box blight and a newly identified and worrying pest: box tree caterpillar.

Managing resources, particularly water, is

increasingly vital. As water becomes scarcer, will we frown on neighbours who use it for hanging baskets rather than for crops? And can we be encouraged to find other ways of saving water? The new RHS science labs will teach everyone how to cope with

the ever-shifting target that is climate change.

Scientists need to be a step ahead of what is happening to biodiversity and natural resources, so they can help the rest of us to manage the problems that face

*'Scientists need to be a step ahead, so they can help the rest of us to manage the problems that face us now.'*

us now. These are issues that were not around in CP Snow's time, let alone when the Wisley labs were built in 1907.

City gardens are high on Roger's research list. Gardens tend to be given over to extensions or offices for people to work from home, but keeping the city green matters more than ever. A quarter of London's land is occupied by gardens – which can support wildlife, help to cool the area or mitigate the flood risk that comes with freaky weather brought by climate change. There are many existing hard areas where stormwater can run off and cause local flooding. I asked about green walls, but Roger says green roofs are probably a simpler way of delivering environmental benefits in built-up places.

The current flux in the natural world is worrying. After my trip to Wisley I felt more confident that, in the capable scientific hands of the RHS, all gardeners would be better prepared to cope with change. But not, I fear, that I could ever begin to understand or to emulate the methodical and tidy-minded approach of the Wisley scientists. ●

❖ National Science & Engineering Week, 9-18 March: see p89 for events at RHS Gardens.



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