

ENRICHING EVERYONE'S LIFE THROUGH PLANTS

The RHS exists to ensure that gardening improves people, plants and the planet. Here, in the second of a three-part series, a member of Council examines how the charity furthers the understanding, knowledge and appreciation of the plants gardeners grow

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RHS Plant Trials (above left) are carried out to see how plants perform in similar conditions, helping gardeners to choose the most reliable selections. The Dry Garden at RHS Garden Hyde Hall in Essex (above) displays drought-tolerant plants.

The human race can often be quite self satisfied and swept away by its own omnipotence. This is, probably, partly why we are now confronted by so many environmental and climatic problems, yet only the most arrogant among us will fail to acknowledge the truth that, without plants, not only would we be in even deeper trouble but so too would every other living creature on this green earth. Plants feed us, clothe us, shelter us, protect us, warm and enchant us every day. Even those not interested in gardens or growing are in thrall to plants. They are, in reality, the most powerful presence on the planet.

Many plants live their lives happily without help; native trees germinate, flourish and topple a century later unnoticed by us. However, those plants we have harnessed to our will for whatever reason – fields of wheat, rows of lettuces, orchards, farms and, importantly to anybody reading this, our gardens – do depend on some human intervention.

Gardeners are generally in touch with plants more than many people and we are all seeking knowledge and advice. For this we eagerly reach for libraries, magazines and the internet for guidance and you will soon find that, whenever we do this, we are more than likely to end up in the hands of the RHS: for more than 200 years it has been the hand on the tiller of horticulture in the UK.

For the RHS it is the plants we gardeners grow that are a particular focus. There are many organisations across the world concerned with the preservation and exploration of wild habitats, but few who concentrate on the little wildernesses closest to many of us – our gardens. So many at the RHS are steeped in the magic of plants: be they hands-on gardeners, those who organise its flower shows, produce this magazine, keep a sharp eye on the accounts, run a Bloom Group, dish out cakes in the garden cafés or help with educating our children.

New home for horticultural science

The expertise the Society offers begins with science. The RHS employs 70 leading scientists who know plants in far greater depth than most of us ever experience: botanists, soil scientists, entomologists, horticultural advisors and many others. The most obvious contribution to our gardens they make is in answering tens of thousands of gardening enquiries every year: the advisors are seldom stumped and, if they are, then they know where to go to find out the answer because, behind the scenes, important work is going on. For example, have you ever wondered how plants are named? Deciding on nomenclature is not a wild guess, but the result of the labours of taxonomists whose job is to explore the family trees and learn the origins of our garden plants.

There are currently eleven PhD research projects under way at the RHS on specialist subjects ranging from *Narcissus* and *Rosmarinus* to topics such as climate change, air quality and powdery mildew. Likewise, when it comes to peat alternatives, watching out for pests and diseases and water conservation: the RHS is deeply involved. Most gardeners do not realise that every time they buy an AGM plant at a garden centre they are holding in their hands something that has been poked, prodded, tested and judged by experts years before it gets to »

ALL IN THE NUMBERS

The National Centre for Horticultural Science and Learning

The new centre at RHS Garden Wisley (below) will provide an important upgrade to the Society's science and learning facilities. It will enable the RHS to deliver high-quality scientific research, while sharing scientific understanding with visitors as well as schools, universities and industry. With this knowledge the RHS will be better able to help gardeners and communities across the UK to build a greener future.

Surrounding the building, three new gardens will focus on wildlife, world food and wellbeing. The RHS has made a commitment to invest significantly in the centre as a national resource, but it also needs the support of its members and supporters to help create the new centre.

The building will be home to many of the Society's plant scientists, horticultural advisors and information specialists, staff that are helping to foster greater public understanding of plants, gardens and gardening, while also training the next generation of horticultural scientists. RHS staff, for example, are currently helping to supervise 19 different PhDs.



110,000

The number of enquiries that the RHS Gardening Advice Team answered in the past year

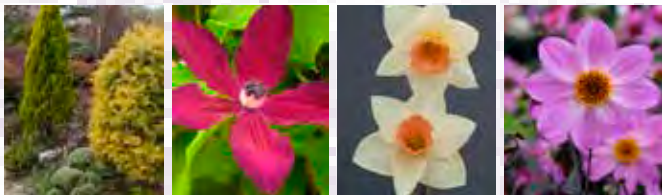


25,000

plant taxa are represented at RHS Garden Wisley alone

9 plant groups

The RHS is international registrar for nine plant groups

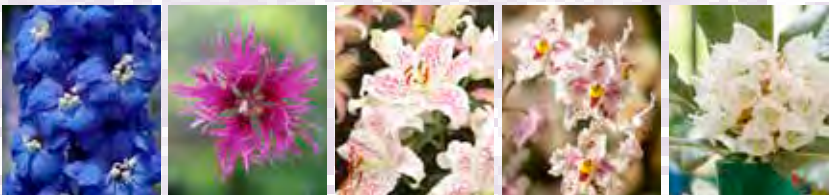


Conifers

Clematis

Daffodils

Dahlia



Delphinium

Dianthus

Lilies

Orchid hybrids

Rhododendron

278,000

different plant names are contained in RHS plant databases

30

scientists work for the RHS, improving the understanding of plants



your garden. Although this work is mostly invisible, it is vital we never underestimate its importance. The public face of this will be the new National Centre for Horticultural Science and Learning which will soon begin to rise from the hilltop at Wisley. State-of-the-art laboratories will be surrounded by three new gardens because, to be honest, all this science only comes alive for most of us when it appears in our gardens.

Influence that reaches far and wide

Let us leave the laboratories and see how this work spreads itself through the wider world. If we wander off into the gardens, the science of plants is still with us: microclimates and environments are found in all RHS Gardens. It is a big show-and-tell bench, from which we can find inspiration for our own gardens no matter where we live: whether you have wet bits, dry bits (if you have not yet seen the Dry Garden at RHS Garden Hyde Hall in Essex then you should), woody glades or hot sunny borders. There are trials fields – where particular plants are put through their paces so members know which are the best *Colchicum* or *Cornus* (for example) – and Plant Heritage National Plant Collections of species as varied as heathers and gooseberries.

The difference is that once plants have been liberated from the slightly sterile laboratory environment, they need to look their best, which is why the RHS has always used top designers and curators to help ensure plants have the best places in which to perform. Fashion affects gardens just as it does frocks and trousers, and new places need to be found for new combinations of plants. Visitors want to be able to appreciate the gardens as beautiful, peaceful, colourful and calm places in which to sit and wander. We want to stand in awe before swaths of spring bulbs, to bask in the brightness of summer colour and scuffle through piles of scarlet autumn leaves. From these big, professionally cared-for gardens it is



The Hot Garden at RHS Garden Rosemoor, Devon (above left) and the Glasshouse at RHS Garden Wisley in Surrey (above) are examples how, through scientific study and the expertise of its gardeners, the RHS shares its knowledge of ornamental plants with visitors and students alike.

one small step back to our own plots where all that expertise and clever science should end up. Gardening is a long trail of satisfaction: the pleasure of simple things like a well-striped lawn or a home-grown potato has sprung from the satisfaction of scientists developing a new strain of garden plant or through protecting it from an unsavoury garden pest.

Common to all of these things are, of course, the plants themselves: everybody loves them and needs them – they make us feel good physically (there are more than 28,000 plants being used in medicine) and mentally. Even people who are unable to garden need plants. They satisfy all of our five senses and they witness every important moment in our lives. Flowers mark births, marriages and, inevitably, deaths. Vegetables, herbs and fruits feed us every day, trees give us wood and we cavort on lawns and sports pitches. The exciting thing is that we still do not know everything. Out there in the deepest rainforests and high mountain plains (and even in hedgerows and gardens) there are plants yet to be discovered. Some will change medicine and some of them will end up in our gardens, or at least the gardens of our grandchildren.

Plants will be here long after man has faded away and all of our concrete structures, and even our plastic bottles, have disappeared back into the earth. They are survivors: it is time we stopped taking them for granted. **O**

Resources

For RHS Gardening Advice, visit rhs.org.uk/advice.

To learn about the Society's scientific work, its science strategy, *Gardening in a Changing Climate*, and to read blog posts from RHS scientists, visit rhs.org.uk/science

If you would like to support our science work or help us create the new centre with a donation, visit rhs.org.uk/sciencedonations