Trees and Shrubs *Online*

Genera of woody plants are steadily being revised and made available on the internet by the Society. **TOM CHRISTIAN**, assistant editor for the project, updates us on the groups of plants and completed genera that will be published by the summer of 2021.

Sitting down to write an update on *Trees and Shrubs Online* in spring 2021, one is forced to address the topical dilemma: whether or not to mention the C-word? On balance, it cannot be ignored in this context any more than it can be ignored in any other, for as we have heard so much during the past year or so, there have been positive and negative impacts, and there are sure to be several more twists and turns before this yearbook falls through letterboxes in a few months' time.

Trees and Shrubs Online (TSO) activity over the past year mirrors this fact. Our international team of authors includes those who have had to divert their full attention to domestic matters in response to the pandemic, and others, like myself, for whom the suspension of normality created an opportunity to forge ahead. On a personal note, this has enabled me to complete a full revision of a favourite genus, *Abies*, far quicker than would have been the case in normal circumstances. The thwarting of a projected study trip to the USA was an inconvenience rather than a disaster, and those collections I was able to visit during the summer, in the UK and in Sweden, provided ample coverage of this often-difficult genus.

Our international team of authors has grown in 2020, with new initiates at work preparing texts on a range of groups. We have been joined for example by Roderick Cameron in Uruguay, who is working with Allen Coombes in Mexico on *Quercus*. This highly effective partnership has already seen the first major batches of oaks published: *Quercus* Section *Ilex*, comprising 32 species; and *Quercus* Section *Cerris*, comprising 15 species and four hybrids. Among these, 16 species and two hybrids have the exciting claim to be 'new since *New Trees*'. All are beautifully illustrated by a truly extraordinary range of images, thanks to the generous contributions of a range of talented photographers.

Several other important groups have been revised in the past year, including *Buddleja* and *Nothofagus*, whilst *Cornus*, full of horticultural stalwarts, is nearing completion. The monospecific genus *Lyonothamnus* deserves to be far better known; fortunately, the world can now read all about it. Many more maples have been updated, together with a new genus article; you will now find modern accounts for all the Eurasian members of Section *Acer* (*Acer caesium, A. pseudoplatanus, A. monspessulanum,* etc.) and all Section *Platanoidea* species (*A. campestre, A. cappadocicum, A. pictum,* etc.) together with the rather perplexing group of species allied to *A. campbellii*.

A revision of the woody peonies, another horticulturally significant group, was kindly sponsored in memory of the late Hedvika Fraser. These plants

photograph © Stuart Senior

A fine specimen of *Lyonothamnus floribundus* subsp. *aspleniifolius* grown by Stuart and Helen Senior, members of the Society, who generously sponsored the entry for Trees and Shrubs *Online*.

Abies is the first large genus of conifers to be fully revised for Trees and Shrubs Online. It is a major work carried out by Tom Christian.

are as bewildering as they are captivating: preparing a new account of them afforded Julian Sutton an opportunity to take a fresh look, free from the burden of existing, often unsatisfactory approaches to their classification. He explains below how he came to make sense of the muddle.

Following much research in recent years new texts for familiar members of the honeysuckle family reflect a range of necessary taxonomic changes. The background to this is explained in the generic accounts for *Linnaea* and *Abelia*; the latter has been split into several segregate genera to reflect scientific reality, but the alternative approach—for the status quo had become untenable—would have meant the loss of such familiar names as *Dipelta*, *Kolkwitzia*, and even *Abelia* itself.

Looking ahead, 2021 promises exciting progress. By the end of this year most North American *Acer* species should be complete, along with further oaks, and full revisions of accounts of the genera *Alnus*, *Arbutus*, *Cercidiphyllum*, *Cornus*, *Liquidambar*, *Metasequoia* and *Nyssa*. The complete list of updated genera is available at https://treesandshrubsonline.org/about/completed-groups/

As ever, we remain in need of sponsorship to enable further works to be commissioned. With *Abies* the first large genus of conifers to be fully revised, *Picea* is an obvious next step, so too the many smaller, more manageable groups such as larches, redwoods, and the enigmatic ginkgo. Japanese maples (*Acer* Section *Palmata*) are a daunting priority, and we would be especially

photograph © John Grimshaw

Information is being sought for the genus *Hoheria* for Trees and Shrubs *Online*: please help if you can. Above is *H. lyallii* at Hergest in July 2019.

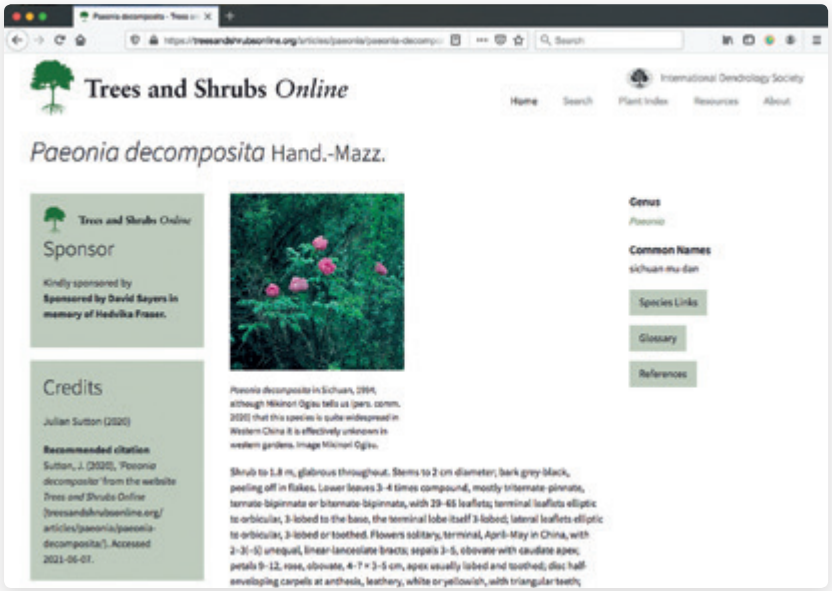
grateful to hear from anyone willing to sponsor these, which would push this important genus to within sight of the finish line. As ever, if you are interested in sponsoring a favourite group please write to John Grimshaw: editor@treesandshrubsonline.org

Also this year, we are appealing to IDS members to share their experiences of the genus *Hoheria*, especially those who grow, or kill, the various species and hybrids within our study area of the northern temperate regions. Anyone seeking to understand these attractive plants must contend with the vexing issues of great variability, juvenile *versus* adult foliage, hybridization, and, at least in a horticultural context, inadequate literature. We are particularly keen to hear about where in Europe and North America they are being successfully grown, exceptional specimens (ideally with photographs), possible unrecognised hybrids and other 'odd' trees, and any good new selections which are yet to be distributed. Please write to: hoheria@treesandshrubsonline.org

Julian Sutton on *Paeonia*

A new account of woody *Paeonia* provided the opportunity to break with some traditions of western reference books, to reflect a contemporary view of the wild species, and to address the diversity of hybrids outside of a formal (restrictive) taxonomic hierarchy. All woody peony species are endemic to China, where for well over a thousand years they have been harvested and cultivated for medicine, brought into gardens for ornament, selected, hybridized, traded around the country and abroad, planted back into the wild —in other words, thoroughly appreciated and muddled. From the beginning of the nineteenth century, western botanists have attempted to classify woody peonies scientifically, based on a trickle of mostly hybrid material, and with an inevitable ignorance of this complex history. It has taken much serious work by Chinese botanists in the late twentieth and twenty-first centuries, often marked by vitriolic disagreement, to move towards a mature understanding of the wild species, but we still live with some consequences of past confusion.

The origins of the various hybrid groups are much better understood among peony specialists but have too rarely filtered out to the rest of us; we have tried to redress this in the account for *Trees and Shrubs Online*. One casualty has been the familiar and dangerously useful name *Paeonia suffruticosa*. With or without a hybrid marker, it has been used for more than 200 years in a



A completely new account of the genus *Paeonia* has been written by Julian Sutton for Trees and Shrubs *Online* in 2020.

bewildering range of ways, sometimes including wild plants which would now be placed elsewhere, sometimes only for hybrids, but again in diverse ways. Andrews originally applied the name in 1804 to what was apparently a Central Plains cultivar (an ancient group of complex hybrids much grown in parts of China), but in practice the main recent use of this name seems to have been as a taxonomic dumping ground for all those hybrids which the author in question chooses not to place anywhere else. As such, it carries only an illusion of meaning and we suggest its abandonment.

We chose to discuss hybrids in a series of informal assemblages ('groups' rather than the formal 'Cultivar Groups' of the RHS) which reflect their origins and predominant features, admittedly ill-defined at the edges as befits reality, but carrying a great deal of explaining power. More familiar examples include Central Plains, Gansu, and Japanese Cultivars, as well as Lutea Hybrids; but modern breeding is busily breaking down the boundaries of any group any author chooses to adopt, and it is likely that within the next decade or so there will be a compelling need for a new classification, based solely on observable features rather than generalisations of history or parentage. There is, after all, no imperative to force hybrids into a formal taxonomic framework as is done with their parent species; who would nowadays contemplate doing this with ornamental crab apples? For now this new account is, we hope, as practicable a treatment as is possible at the current time.