Journal of the MARDY ORCHID SOCIETY

Vol. 17 No. 1 (95) Winter 2020



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Front Cover Photograph

Steve Pickersgill's first placed photograph of *Caladenia harringtoniae* from Class 5 in the HOS Photographic Competition 2019.

Rear Cover

Gillian Elsom's "Best Projected Image" of *Epipactis helleborine* from Class 15 in the HOS Photographic Competition 2019. JOURNAL of the HARDY ORCHID SOCIETY Vol. 17 No.1 (95) Winter 2020

The Hardy Orchid Society

Our aim is to promote interest in the study of Native European Orchids and those from similar temperate climates throughout the world. We cover such varied aspects as field study, cultivation and propagation, photography, taxonomy and systematics, and practical conservation. We welcome articles relating to any of these subjects, which will be considered for publication by the editorial committee. Please send your submissions to the Editor, and please structure your text according to the "Advice to Authors" (see Members' Handbook, website <u>www.hardyorchidsociety.org.uk</u>, or contact the Editor). Views expressed in journal articles are those of their author(s) and may not reflect those of HOS.

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Editorial Note Mike Gasson

This *JHOS* is loaded with good orchid photographs, partly as a result of the HOS Photographic Competition which continues to inspire great images. All the winners are on the HOS website and I managed to dedicate four internal pages, plus both covers, to some of them. Also our Chairman, Colin Scrutton, has provided a major article on South African orchid species with some really good illustrations. His complete article was a little too long to fit in this issue so we have Part 2 to look forward to next time. As mentioned by Colin in his 'Chairman's Note' you will doubtless notice the cover change from 'January' to 'Winter' – new decade new name! We will aim to keep to the established distribution months but this change to seasons gives some much needed flexibility as it is all too easy to have trouble meeting a narrow 'within a month' distribution window. Past problems have involved editorial slowness, non availability of sufficient articles, slow printing and distribution logistics. The latter include a notable instance when the entire batch had to be reprinted after being left out in the rain by a courier! Hence you should still expect *JHOS* to arrive in its established month but don't panic if occasionally it is a little later!

Chairman's Note Colin Scrutton

A Happy New Year to you all. I hope you all had a very pleasant and relaxing Christmas and are now starting to plan your orchidological excursions for 2020, as we are below. But first, looking back to the November meeting at Kidlington, I was very disappointed that I was not able to oversee what was, apart from the AGM, my final meeting as Chairman. I didn't feel that I could inflict an unpredictable hacking cough on speakers and audience. I understand it went well, with over 100 registered attendees and a fine guest presentation on orchids and fungi by Professor Marc-André Selosse from the Muséum national d'Histoire naturelle in Paris. My thanks to Carol Armstrong, our Vice-Chairman, for taking over at short notice.

We are beginning to plan for another trip to Australia in 2020, possibly our last. Our main friends live in Sydney and we have been watching the wild fires in NSW with concern. They have been keeping us up to date with aerial overviews and the latest developments. They are suffering badly from smoke pollution when the wind is in the wrong direction but fortunately are not directly threatened by fire. Since I wrote that, friends of theirs with a delightful property in Yango National Park, where we have stayed a couple of times, first heard that their house had been saved, only for it to be burnt out a few hours later! What a disaster, but luckily no-one was injured. That fire is now part of a "mega blaze" covering 1150 sq. miles just an hour's drive from Sydney, currently too big to be put out! Fires in Western Australia, where we will spend a good deal of the trip, are scattered and very local, but prescribed burns are widespread in the southwest. We just hope that the situation will not be as bad next year.

Our Field Meetings Co-ordinator, Richard Kulczycki, has put together another excellent field meetings programme for 2020. At the moment, 14 meetings are proposed, ranging from Cumbria to Hampshire and Anglesey to Surrey. By the time you read this, they will be listed in full on the Society's website. I hope they will be well supported.

A big problem, now developing is the future of the Forum currently hosted by Yahoo Groups. It is no longer possible to upload content and our existing posts, photos and documents were taken down by Yahoo in December. We now need to decide whether Yahoo continues to meet HOS needs or whether we should move to a new provider. Obviously, any change will keep member's personal data protected. Details will be posted as soon as this is resolved.

I have to return again to the need for a volunteer to take over the sound system for meetings at Kidlington from next November. Previous pleas seem to have fallen

on deaf ears. The details were set out in my last Chairman's note and we will be encouraging anyone interested to chat to John and Shelagh Temporal at the April meeting. I do hope we can find a willing recruit otherwise future meetings may not have enhanced sound. In addition, we are still urgently seeking a volunteer to take on the organisation of the Plant Show at the April meeting. If you can help either of these posts please contact me

Finally, I wonder if you have noticed a change on the front cover of the journal. Rather than "January 2020", it is now "Winter 2020". Subsequent parts for the year will be respectively the Spring, Summer, and Autumn issues. The Committee agreed this change on the recommendation of the Editor as for various reasons (supply of material, printing problems, etc.) it is not always possible to publish in a specific month. The quality of the publication and the flow of interesting and varied content will, of course, remain the same.

Results of Photographic Competition 2019

Class 1. A view of an area (landscape or habitat) showing orchids in their natural environment, print size up to 7×5 inches (11 entries)

- 1st Karen Gregory Gymnadenia conopsea
- 2nd Barry Taylor Himantoglossum hircinum
- 3rd David Hughes Ophrys sphegodes

Class 2. A group of orchids containing at least three flower spikes. These can be all the same species/hybrid or a mixed group, print size up to 7×5 inches (14 entries)

- 1st Karen Gregory Orchis quadripunctata
- 2nd David Pearce *Cephalanthera longifolia*
- 3rd Ken Elsom Orchis mascula

Class 3. A single orchid spike, print size up to 7×5 inches (14 entries)

- 1st Ken Elsom Anacamptis palustris subsp. elegans
- 2nd Barry Taylor *Dactylorhiza maculata*
- 3rd Gillian Elsom *Spiranthes spiralis*

Class 4. A close-up of an orchid, showing one or more entire inflorescence(s), print size up to 7×5 inches (15 entries)

- 1st Gillian Elsom Ophrys insectifera (Best Print & Maren Talbot Trophy)
- 2nd Hilary Pickersgill Dactylorhiza fuchsii
- 3rd Steve Pickersgill Paracaleana nigrita

Class 5. A close-up of an orchid showing part of an inflorescence, print size up to 7×5 inches (16 entries)

- 1st Steve Pickersgill Caladenia harringtoniae
- 2nd Hilary Pickersgill Anacamptis morio
- 3rd Gillian Elsom Spiranthes spiralis

Class 6. A view of an area (landscape or habitat) showing orchids in their natural environment, print size up to A4 (11 entries)

- 1st Alan Blackman *Dactylorhiza sambucina*
- 2nd Barry Taylor Dactylorhiza fuchsii
- 3rd Karen Gregory Orchis pauciflora

Class 7. A group of orchids containing at least three flower spikes. These can be all the same species/hybrid or a mixed group, print size up to A4 (15 entries)

- 1st David Pearce Spiranthes spiralis
- 2nd Gillian Elsom Corallorhiza trifida
- 3rd= Karen Gregory Goodyera repens
- 3rd= Steve Pickersgill Caladenia longicauda subsp. redacta

Class 8. A single orchid spike, print size up to A4 (14 entries)

- 1st Ken Elsom Orchis anthropophora
- 2nd Hilary Pickersgill Anacamptis morio
- 3rd Gillian Elsom Ophrys insectifera

Class 9. A close-up of an orchid, showing one or more entire inflorescence(s), print size up to A4 (16 entries)

- 1st Phil Smith Platanthera chlorantha
- 2nd Gillian Elsom *Anacamptis pyramidalis*
- 3rd Richard Laurence Dactylorhiza fuchsii

Class 10. A close-up of an orchid showing part of an inflorescence, print size up to A4 (16 entries)

- 1st Steve Clements Ophrys tenthredinifera
- 2nd Hilary Pickersgill Dactylodenia st-quintinii
- 3rd Gillian Elsom Epipactis leptochila

Class 11. A view of an area (landscape or habitat) showing orchids in their natural environment, in jpeg form (21 entries)

- 1st Steve Pickersgill Orchis mascula
- 2nd Alan Parfitt Gymnadenia densiflora
- 3rd Karen Gregory Dactylorhiza viridis

Class 12. A group of orchids containing at least three flower spikes. These can be all the same species/hybrids or a mixed group, in jpeg form (24 entries)

- 1st Ivar Edvinsen Orchis anthropophora
- 2nd Steve Pickersgill Drakaea glyptodon
- 3rd Tom Turner Dactylorhiza incarnata subsp. pulchella

Class 13. A single orchid spike, in jpeg form (23 entries)

- 1st Christopher Hoskin Neottia nidus-avis
- 2nd Chris Nicholson Anacamptis morio
- 3rd Mike Waller Liparis loeselii

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Class 14. A close-up of an orchid, showing one or more entire inflorescence(s), in jpeg form (26 entries)

- 1st Alan Parfitt Cephalanthera longifolia
- 2nd Ken Elsom Gymnadenia rhellicani
- 3rd Gillian Elsom *Epipactis helleborine*

Class 15. A close-up of an orchid showing part of an inflorescence, in jpeg form (26 entries)

- 1st Gillian Elsom *Epipactis helleborine* (Best projected image)
- 2nd Steve Pickersgill Caladenia caesarea subsp. caesarea
- 3rd Sean Cole Ophrys apifera

Class 17. Novice Class, any hardy orchid in jpeg form (6 entries)

- 1st Jon Dunn Serapias lingua
- 2nd Jeff Hodgson Ophrys rhodia
- 3rd Callum Macgregor Liparis loeselii & Epipactis palustris

Class18. A hardy orchid subject that has been manipulated creatively using any advanced software technique to create an artistic image, print size up to A4 (3 entries)

- 1st David Pearce 'Orchidaceae freshly clicked'
- 2nd Gillian Elsom *Spiranthes spiralis*
- 3rd Alan Blackman Cypripedium calceolus

Class 19. A hardy orchid subject that has been manipulated creatively using any advanced software technique to create an artistic image, in jpeg form. (2 entries)

- 2nd Steve Tandy 'Yellow Bee Orchid'
- 3rd Catriona Campbell 'Untitled'

Maren Talbot Photographic Trophy:

Gillian Elsom for her print of Ophrys insectifera in Class 4

Best Projected Image:

Gillian Elsom for Epipactis helleborine in Class 15

Our thanks to the Competition Judge: Jon Evans

The following pages feature a selection of winning images from the 2019 HOS Photographic Competition. Figure numbers indicate the Class followed by the position (e.g. 11-2 is second place in Class 11). All of the winning photographs are now on the HOS website.







Field Meetings Report 2019 Richard Kulczycki

We had seven field trips this year. In total we saw at least 25 orchid species, five named hybrids of which two are rare, plus at least seven named varieties, again including some very rare ones. Many thanks to Alan Bousfield, who organised this year's programme. Several trips have been written up individually, but here are brief accounts of the other three.

On April 21st ten members of the HOS, led by David and Christine Hughes, met on the Purbeck coast on a very blustery day. The forecast was for 70 mph winds, but this only put off a few members. We were greeted by tens of thousands of perfect Early Spider-orchids, *Ophrys sphegodes*, along the top of the coastal escarpment and down to the top of the sea cliffs for several miles, mostly in fine sunshine. Just west of Dancing Ledge there is a small promontory where we enjoyed a good number of multicoloured Green-winged Orchids, *Anacamptis morio*. To make this a three orchid day we drove on to the Downs beyond Church Knowle where the Earlypurple Orchids, *Orchis mascula* were plentiful and perfect despite the cattle grazing in their field. So we had a perfect start to the orchid season.

Nine members met in the middle of Minchinhampton Common on Saturday 15th June, led by Angela and Colin Scrutton. Unfortunately the weather forecast was wrong yet again, this time to our detriment. The drizzle started getting heavier as we set off across the Common but soon we were right amongst the orchids as the traffic and golf balls shot past. We found Chalk Fragrant-orchids, Common Spotted-orchids, Common Twayblades and Bee Orchids galore. A few Early-purple Orchids were hanging on. News of a Lizard Orchid spike, which we could not locate, augurs well for next year. The highlight was var. *bicolor* Bee orchid, first one then several small clusters. The traditional and consistent grazing regime, letting cows out in early summer, seems to work very well for the orchids. We were kindly invited to Maureen and Nigel Denman's house to eat our lunches, where we dried out, while we were plied with teas, cakes and fruit. Thank you! After lunch we went to another location where we were shown Fly Orchids plus some hybrids between Bee and Fly Orchids. Photography was attempted, but the weather was now very inclement. As we said our goodbyes, the clouds cleared and the Common glistened in the sunshine.

On 30th June we went back to Noar Hill, led by Rosemary Webb and Nigel Johnson Last year's trip was written up in the January 2019 Journal. This year we had 17 members present, including a number of new members, and we all enjoyed the bright

Figure 1: Hybrid between Bee and Fly Orchids, *Ophrys ×pietzschii*. Figure 2: Fly Orchid *Ophrys insectifera* Photos by Colin Scrutton

sunshine, plentiful butterflies as well as the orchids. As well as the expected orchids described in last year's report we saw all-white forms of Common Spotted-orchid, Chalk Fragrant-orchid and Pyramidal Orchid, plus the rare var. *emarginata* form of this species. To top this a superb hybrid between Common Spotted-Orchid and Chalk Fragrant Orchid popped up just as we were finishing our lunch. Seventeen pairs of eyes are definitely better than one! We look forward to a new orchid season in 2020 which will have an expanded Field Trip program.

Field Trip to Chappett's Copse Rosemary Webb

On Sunday 18th May everyone found their way to the entrance of Chappett's Copse which is a Hampshire and Isle of Wight Trust Reserve. It is a small but very special place. Most of it is deciduous woodland, largely beech with some areas of hazel. There are clearings in places and relatively open paths. The main path into Chappett's Copse leads north, parallel with the lane. The woodland between the lane and the track at this end has a few large beech trees with lower, younger growth. In the leaf-mould there are often good specimens of Bird's-nest Orchids (*Neottia nidus-avis*) but we could not see any today, which was disappointing. However, the ground was very dry. Just near the track entrance there is a multi-spiked plant of Narrow-leaved Helleborine (*Cephalanthera longifolia*) but it was not yet in full flower. A little further along there is a grove of hazel under which there is a colony of Broad-leaved Helleborines (*Epipactis helleborine*) which were showing young shoots. There are also increasing numbers of White Helleborine (*Cephalanthera damasonium*) some of which were in bud.

The path continues and there is a lovely atmosphere here. You could believe you were in a larger wood, birds singing, wild flowers and the wonderful green light from the canopy of newly emerging young leaves of the overhanging branches. It has been a warm, dry winter and spring and the trees are further in leaf than sometimes. Amongst the leaf litter there grow Celandines (*Ranunculus ficaria*), Sweet Woodruff (*Galium odoratum*), Bugle (*Ajuga reptans*), Herb Robert (*Geranium robertiarnum*), Solomon's Seal (*Polygonatum multiflorum*), Spurge Laurel (*Daphne laureola*) and the country's largest colony of Narrow-leaved Helleborine (*Cephalanthera longifolia*). Old, decaying tree trunks and stumps host fungi particularly resupinates. As we move along the path, plants of *C. longifolia* were flowering on the edge. Some were tempted to take photographs straight away but were assured that they were about to be amazed a little further on.

Figure 1: Narrow-leaved Helleborine, *Cephalanthera longifolia*. Figure 2: White Helleborine, *Cephalanthera damasonium* Figures 3 & 4: Hybrid between White and Narrow-leaved Helleborine. Photos by Rosemary Webb



We came to a large, more open area with some large beech trees. Adjacent to the path we have an area set aside where, in recent years, we have been nurturing seedling Fly Orchids (*Ophrys insectifera*). There used to be Fly Orchids scattered in the whole area but these have been dwindling and this year there were none which is very worrying. We were able to show people who had never seen a Fly Orchid two flowering spikes in our reserved area but those familiar with the plants kindly respected a request to keep out of this sensitive area to prevent trampling.

For the first year ever, some of the flowering spikes of *C. longifolia* have been browsed by deer, including a couple of hybrids between *C. longifolia* and *C. damasonium* which have been appearing for several years. We moved to another path leading to a larger open area where there was a colony of Broad-leaved Helleborine more advanced than the ones at the beginning of the wood. The *C. longifolia* were extensive and there was a truly magnificent display of flowering spikes just about at their peak and in perfect condition. There were also a few *C. damasonium* but very much in bud. There are usually some Bird's-nest Orchids here but again there were none today, only seedheads left from the previous year. A little further on we finally found three Bird's-nest Orchids in flower – rather spindly little spikes but definitely clearly recognisable.

We then turned inland and Rosemary took the group to see something interesting but not an orchid! What we were looking at was an organism commonly known as a slime mould – the Myxomycete, *Lycogala terrestre* in its plasmodium stage. Rosemary explained that this starts life as a single-celled amoeboid organism which feeds by ingesting mainly bacteria. The Myxomycetes were once thought to be a fungus



but actually belong to be a fungus but actually belong to an entirely different kingdom – the protozoa. When feeding conditions are good and the organism encounters suitable mating partners, these coalesce into the plasmodium stage, which we were looking at here. It becomes a mass of beautiful salmon-pink spherical shapes but these are short-lived. We were lucky to see them.

Figure 5 (above): Slime mould Lycogala terrestre in its plasmodium stage.
Figure 6: Hybrid between White and Narrow-leaved Helleborine.
Figure 7: Fly Orchid, Ophrys insectifera.
Figure 8: Bird's-nest Orchids, Neottia nidus-avis.
Photos by Rosemary Webb



We moved on. Again, there were quantities of *C. longifolia* and emerging plants of *E. helleborine*. Here we were able to show everyone the hybrid between *C. longifolia* and *C. damasonium* (*C.* ×*schulzei*) which was just coming into flower surrounded by plenty of normal *C. longifolia* and a fine specimen of *C. damasonium* on the opposite side of the path. This made it very easy to point out the features that were recognisable from each species in the hybrid plants. This was the last area on the walk and having shown what the copse had to offer, everyone was free to wander at their leisure if they wanted to. We were so lucky to find everything in such good condition at this uncertain time of the year. A collection was taken for the Hampshire and Isle of Wight Wildlife Trust, this raised £60. Many thanks.

Field Trips 2020 Richard Kulczycki

One day outdoor walks are arranged during the native orchid season. The Society tries to hold these all over the country so that all members can take part if they wish. We hope that new members will take advantage of our field trips: they are an excellent introduction to the orchids across the country and an important means of meeting other enthusiasts.

These field trips are for HOS members only. Accompanying spouses/partners must also be members; it only costs £3 to upgrade to family membership. You may be asked to show your membership card so please take it with you. The leader's role is to help you find your way around the area and help you to see more orchids than you would if you went on your own. General indications of difficulty are included in the individual field trip descriptions, but on the day weather and underfoot conditions may make the trip more difficult. In general, you should prepare as for a remote country walk and expect uneven ground. Orchids tend to grow in wild or brownfield areas. Some trips may include steep slopes or boggy areas Please note that participants are responsible for their own safety and you must make your own decision whether you are fit and healthy enough to participate in any particular walk. Areas visited often have no mobile signal. We normally collect a voluntary donation to any organisation that maintains a site visited on a trip.

We are always looking to run new field trips and to have trips in all areas of the country, so that all members participate in these. Trips can be a couple of hours or full-day, weekend or weekday. We have written guidelines available that will help you organise your field trip. If you would like to consider running a field trip please contact the Field Meetings Co-ordinator, or speak to her/him at any HOS meeting.

Saturday 16th May: Chappett's Copse, Hampshire Leaders: Rosemary Webb & Nigel Johnson,

e-mail: NJohnson@hardyorchidsociety.org

Narrow-leaved Helleborine, White Helleborine and perhaps their hybrid, Bird's-nest Orchid and Fly Orchid. We may go to a further site depending on enthusiasm. Short & easy walking.

Friday 22nd May: East Kent

Leader: Alan Blackman, email: <u>blackman@hardyorchidsociety.org</u> Parkgate Down and Denge Wood to see Monkey Orchid, Greater Butterfly-orchid, Fly Orchid and Lady Orchid (in their best UK location). Up to 12 orchids are possible. Less than two miles of easy walking

Saturday 23rd May: Western Hampshire

Leader: David Hughes, email: <u>dhughes@hardyorchidsociety.org</u> Martin Down for *Neotinea ustulata* and Garston Wood for woodland orchids including *Neottia nidus-avis*. About two miles of walking.

Saturday 30th May: North Downs, near Box Hill, Surrey

Leaders: Ken & Gillian Elsom, email: <u>elsom@hardyorchidsociety.org</u> Brockham Quarry and Dukes Meadow are on the scarp slope of the North Downs and rich in calcareous orchids. We should see: Man Orchid, Fly Orchid, Bee Orchid, Chalk Fragrant-orchid and Common Spotted-orchid with Common Twayblade, and possibly White Helleborine. There are some hazardous paths and steep slopes. <u>https://www.surreywildlifetrust.org/nature-reserves/brockham-limeworks</u>

Saturday 30th May: Northants / Cambs

Leader: Brian Hodgkin and John & Judy Kingston,

e-mail: bhodgkin@hardyorchidsociety.org

Our first trip to the East Midlands for a long time. Barnack Hills and Swaddywell Pit. Man Orchid and Bee Orchid. Seven orchid species are possible. One to two miles of easy walking.

Saturday 6th June: Buckinghamshire Chilterns

Leaders: Richard & Geraldine Hogg, e-mail: <u>hogg@hardyorchidsociety.org</u> We will visit two or more sites in the Chilterns, including College Lake (BBOWT) and Aston Clinton Ragpits (BBOWT). We hope to see Bee Orchid, Common Spotted-orchid, White Helleborine, Greater Butterfly-orchid, Common Twayblade, Chalk Fragrant-orchid & hybrids with Common Spotted-orchid, Pyramidal Orchid, and possibly Southern Marsh-orchids & hybrids. Most of the walking is easy.

Saturday 13th June: Anglesey Fens

Leader: Sue Parker, e-mail: <u>SueParker@hardyorchidsociety.org</u> We will visit two of the Anglesey Fens. Marsh orchids (including Narrow-leaved), Fly Orchid plus up to six others. The walking is easy on the boardwalks, but may be boggy if you step off them. Wellington boots are highly recommended. <u>https://www.first-nature.com/waleswildlife/n-nnr-anglesey-fens.php</u>

Sunday 14th June: Anglesey

Leader: Sue Parker, e-mail: <u>SueParker@hardyorchidsociety.org</u> We will continue our exploration of Anglesey. Possible sites include further exploration of the Fens and the dunes at Newborough Warren. The dunes are easy walking near the car park, but the soft sand is heavy going soon after. The orchids are

at least 20 minutes walking.

 $\underline{https://www.first-nature.com/waleswildlife/n-nnr-newborough.php}$

Saturday 20th June: around Leeds

Leader: Charlie Philpotts, e-mail: <u>CPhilpotts@hardyorchidsociety.org</u> Three sites around East Leeds area to see Common Spotted-orchid, Northern Marshorchid, Southern Marsh-orchid, Pyramidal Orchid, Twayblade, Chalk Fragrant -orchid and Bee Orchid. There will also be a wealth of other wildflowers as well as birds and butterflies. Easy walking but good footwear essential.

Sunday 21st June: Minchinhampton & Rodborough Commons, Gloucestershire

Leaders: Colin & Angela Scrutton and Maureen & Nigel Denman e-mail: <u>CScrutton@hardyorchidsociety.org</u>

The commons support a rich flora of orchids including Common Spotted, Common Twayblade, Common Fragrant, Bee, Pyramidal, and Frog. Lizard Orchid is a possibility and *bicolor* and *trollii* varieties of Bee Orchid may also be found. Also Selsley Common for Fly Orchids. Easy walking, some uneven ground and steep slopes.

https://www.nationaltrust.org.uk/minchinhampton-and-rodborough-commons

Sunday afternoon 5th July: Greywell Moors, North Hampshire

Leaders: Peter & Jane Vaughan, email: pjvaughan@hardyorchidsociety.org The site's specialities are large numbers of Marsh Helleborine, including var. *ochroleuca*, and Marsh Fragrant-orchids. Southern Marsh-orchid, Common Twayblade, Pyramidal Orchid, Broad-leaved Helleborine and a few Bee Orchid var. *belgarum* are also present, although the latter has often gone over by early July. The site is relatively compact, and so we will walk less than a mile, but the ground is uneven, damp and sloping in places. We may also visit the Bartley Heath to see Heath Spotted-orchids.

Saturday 11th July: Cumbria

Leader: Alan Gendle e-mail: AGendle@hardyorchidsociety.org

Burton Fell a Cumbria WT reserve for *Epipactis atrorubens* plus var. *pallens* (yellow flowered), *E. ×schmalhausenii* (*E. atrorubens × helleborine* hybrid) *E. helleborine* & *E. phyllanthes* var. *vectensis*. Over a mile walk and 200 metre uphill to get to a limestone pavement where the plants grow. Sure-footedness and a sense of balance required.

Sunday 12th July: Cumbria

Leader: Alan Gendle e-mail: <u>AGendle@hardyorchidsociety.org</u> Sandscale Haws, NNR (Barrow in Furness) for *Epipactis phyllanthes* var *pendula*, *E. dunensis* and *E. palustris*. Over a mile walk over dune slacks – relatively easy terrain.

Saturday 18th July approx - subject to change. Ceredigion, mid-Wales

Leaders: Sue Parker, email: - please do not contact yet. Irish Lady's Tresses. If these flowers reappear, we will organise this trip in conjunction with Natural Resources Wales. Information will be posted on the HOS email forum and website nearer the date.

HOS Seed Sowing Workshop 2020 Sunday 23rd August 2020 Hagbourne Village Hall, East Hagbourne, Oxfordshire

Booking is now open for the HOS Seed Sowing Workshop 2020. The Tutor will be John Haggar, renowned for his skill at hardy orchid seed propagation. The workshop will cover sowing and aftercare of both summer and winter green orchids. A booking form and more details are on the HOS website: www.hardyorchidsociety.org.uk

Please send any queries to Moira Tarrant at moira.tarrant@outlook.com

Corrigendum Richard Bateman

I regret that, in my article entitled 'Next-generation dactylorchids' (*JHOS* 16(4): 114–128), the parentage of the allopolyploid species *Dactylorhiza armeniaca* was given incorrectly in both Figure 2 and Table 1; *D. umbrosa* should have been given as the 'mother' and *D. euxina* as the 'father'. I thank Bill Temple for pointing out my error.

South African Orchids, A Selection – Part 1 Colin & Angela Scrutton

Southern Africa (South Africa, Lesotho and Swaziland) has 464 species of orchid, excluding nine species not seen for over 50 years (Johnson & Bytebier 2015). Just over 300 of those species are known nowhere else. They are placed in 53 genera, six of which are endemic to South Africa. All but 52 species are terrestrial.

We have visited South Africa several times, both in the Drakensberg and the Western and Eastern Cape. There are some orchids in flower in every month of the year but peak flowering runs from October to January, later in the Drakensberg than in the Cape regions. In this article, we have concentrated on genera and species that are endemic to Southern Africa for the most part.



Figures 1-3: *Ceratandra globosa*. Scales for whole plant 10cm, for close-ups 1cm (scales similar for all other illustrations).

All Photos in this article by Colin Scrutton

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Ceratandra is a genus of six species restricted to the Western Cape. *C. globosa* is the commonest of these with a discoidal inflorescence of non-resupinate flowers. The spike has numerous narrow, tapering leaves at the base and many sub-parallel cauline leaves. The flowers have two large white lateral petals almost completely obscuring the dorsal sepal to which they are fused. The pollinia are attached to the side of the rostellum processes which bear the stigmas at their tips. The white lip is fan-shaped.



Figures 4-6: Corycium nigrescens. Figures 7: Corycium dracomontanum.

Corycium is a genus of 14 species restricted to South Africa. *Corycium nigrescens* is common in the Drakensberg and the Eastern Cape. There are narrow spear-shaped leaves in the lower part of the spike and the floral elements are compressed into sub-globular flowers scattered more or less densely along the spike above. *C. dracomontanum* is less common but very similar. The easiest way to distinguish the two species is by the rolled lobes above the lip, parallel in *C. nigrescens* (Fig. 6) but diverging in *C. dracomontanum* (Fig.7).

Orthochilus foliosus is also common on the grasslands of the Drakensberg and Eastern Cape. It is distinguished by two or three stiff, narrow, divergent leaves extending well above the spike. The flowers are drooping with the pale green sepals and petals obscuring the three-lobed labellum, which is a deep reddish-brown in colour.



Figures 8-11: Orthochilus foliosus.

Holothrix is a largely South African genus but for two species in the Arabian Peninsula. 23 species occur in South Africa, two of which are illustrated here. *Holothrix villosa*, from the Western Cape, is usually found growing on moss in rock crevices. There is a pair of opposite, flat-lying leaves at the base with the inflorescence concentrated towards the top of the spike. The flowers all face one side. They are tubular ending in a star–shaped arrangement of the petals and the three-lobed lip. The sepals are short and there is a curved spur. *Holothrix orthoceras*, which also has a pair of basal leaves, in this case with light coloured veins, grows in the Eastern Cape and the Drakensberg, usually on mossy rocks. The flowers again face towards one side of the spike but are quite different in form, white with three veins on the palm-shaped lip with short side lobes and rolled, narrowly tapering lateral petals. The spur is a straight narrow tube.

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Figures 12-13: Holothrix villosa. Figures 14-15: Holothrix orthoceras.

Mystacidium is the only genus of epiphytic orchids illustrated here. It is restricted to Africa with most species in South Africa. *Mystacidium capense* is common in forests from the Western Cape up into Northern South Africa attached to trees by a tangle of thin white roots. The white flowers are star-shaped and the nectar-bearing spur is long, straight or gentle curved, and tapering. The dark-green leaves are long, narrow and grooved. It is pollinated by Hawk Moths.



Figures 16-17: Mystacidium capense.

Huttonia is a genus of six species restricted to Southern Africa, all pollinated by oil-collecting bees. Both of the species illustrated are found in the cool forests of the Drakensberg, although *H. pulchra* extends from the Eastern Cape almost to Swaziland. The spike characteristically has one larger leaf, stalked in *H. fimbriata*, and a smaller, stem-clasping leaf higher up on the opposite side of the spike. These small flowers are immensely attractive with their pale, whitish, fringed petals, the blades supported by cylindrical claws, very short in *H. fimbriata* but half the petal length in *H. pulchra* in which the blades are funnel-shaped. The sepals are small, pale green, and folded back in *H. fimbriata*.



Figures 18-19: Huttonia fimbriata. Figures 20-21: Huttonia pulchra.

Bartholina etheliae is another extraordinary orchid in which the labellum is split into numerous narrow plates from which extend thin threads each terminating in a tiny white knob. The flower is only 10 cm tall, with a single circular leaf flat on the ground, growing under shrubs and extremely difficult to spot. The lateral petals are pale green with blue extensions, held vertically. The sepals are a darker green, broader, folded, the laterals longer than the dorsal, and extended upwards. A short conical spur is pressed against the underside of the ovary and upper spike. There are only two species in this genus, restricted to Southern Africa and Namibia.

The version of *Stenoglottis fimbriata* pictured here (Figs. 24-25) is a lithophyte, but the species can also be terrestrial or epiphytic. The genus is endemic to Africa and this species ranges from the Eastern Cape, the northern end of the Drakensberg up to northern South Africa. There is a circlet of leaves, which are characteristically wavy-edged and often spotted, and the flowers are a delicate lilac with spots on the labellum.

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Figures 22-23: Bartholina etheliae.



Figures 24-25: Stenoglottis fimbriata.

Habenaria is a world-wide genus of many species distributed across tropical and subtropical regions. Many species are found across Africa with around 30 in Southern Africa. Three species are illustrated here. *H. dives* is common in the Drakensberg and adjacent regions. Most of the spikes we saw were between 30 and 50cm tall but it may reach over 70cm high. The sepals are green, oval and frequently folded back

over the ovary. The petals and lip are white usually tipped with green. The lateral petals are split, the upper lobes adjacent to and extending above the dorsal sepal, the lower short, tapering and extending just short of the anther canals. The pollinia are housed in column arms which extend forward at the base bearing the viscidia. The two stigmas, dark green and glistening, are extended on short arms. In Fig. 29, the flower has just been pollinated and the two stigmas are covered in pollen.



Figures 26-29: Habenaria dives.

Habenaria humilior is structurally similar but with narrow sepals, white shading into deep green. The upper lobes of the lateral petals are slim, tapering, and subvertical, the lower lobes short, adjacent to the column. Both the stigmatic arms, which are longer than in *H. dives*, and the anther canals, are notably divergent. The spur extends along the underside of the stalk, twisted and with a terminal swelling. It has a disjunct distribution, in the Drakensberg and in northernmost South Africa.

Habenaria laevigata is quite different in appearance. The flower is a yellowishgreen with a substantial hood over the column composed of the dorsal sepal and the adherent lateral petals, which are undivided. The lateral sepals are short, tapering and divergent. The larger middle lobe of the labellum is folded up to obscure the column,

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whilst the shorter lateral lobes are folded down and inward, often just crossing. The spur is completely hidden in the bracts. It is found fairly widespread from the Eastern Cape to northern South Africa and the Drakensberg.



Figure 30: Habenaria humilior. Figure 31: Habenaria laevigata.



Figures 32-33: Bonatea speciosa.

Bonatea is closely related to Habenaria and is largely restricted to Africa. There are 13 species in South Africa of which Bonatea speciosa, "...that extraordinary orchid ... of the Cape of Good Hope." (Darwin, 1862), is the species figured here. It has a coastal distribution from the Western Cape around to the Mozambique border. The plants have mid to dark green, often glossy, broadly oval leaves radiating from the lower part of the spike and a dense, many flowered inflorescence above. The flowers are large, of the order of 40×30 mm. The dorsal sepal is a dark green hood to which the upper lateral petal lobes are fused. The lateral sepals are a paler green, extended horizontally and terminating in a hook. The lower lateral petal lobes are narrow, gently curved, white shading to pale green where slightly twisted, and just below and in front of the lateral sepals. The tri-lobed lip is also green, with the outer arms distinctively curved. The rostellum is sub-box shaped and open at the front with the caudicles curved round from the base of the pollinia to hold the viscidia in front of the rostellum. Just below and gently diverging are the stigmatic tubes. There is a straight to gently curved spur of uniform diameter with a terminal taper, visible top left in Fig.33, where it is 26 mm long.



Figures 34-35: Disperis cooperi. Figure 36: Disperis cardiophora.

Disperis is another, almost exclusively African genus with 26 species in South Africa. A distinguishing feature of these orchids are the pouches developed in the lateral sepals. *Disperis cooperi*, from the Drakensberg and northern South Africa,

has oval to spear-shaped stem clasping leaves at the base of the spike and a dense inflorescence in the upper half. The dorsal sepal is pale reddish-pink, tented and almost wholly enclosing the lateral petals which have a dense area of dark spotting internally. The lateral sepals are tapering and folded with deep pouches mid-length.



Figures 37-39: Disperis fanniniae.

The lip is folded up into the hood and bears a pair of spherical limbs and pointed appendages (bottom left in Fig.35). *Disperis cardiophora*, which has a similar range with a southern extension, has a strongly inflated dorsal sepal partly enclosing the pale mauve lateral petals. The short tapering lateral sepals are pale green with deep pouches at mid-length. The lip is again folded up with limbs and appendages hidden in the deep hood.

Disperis fannniniae, which is common in the Drakensberg and northern South Africa, is widely known as "Grannie bonnets". It has scattered spear-shaped leaves in the lower half of the spike and a cluster of predominantly white flowers above, with narrow tapering bracts, which show up well in the often deep shade in which it grows. The dorsal sepal is a large, arched hood from which the lateral petals, translucent and dark spotted, curve outwards at the base. The lateral sepals diverge below, curved and trough-shaped with pointed terminations. The pouches are shallow. The lip is narrow, folded up into the hood, which obscures the appendages.



Figures 40-41: Eulophia zeyheriana.



Figures 42-43. Eulophia parviflora.

Eulophia is a large genus with 125 species in Africa and 28 in South Africa. *Eulophia zeyheriana* is common in the Drakensberg and extends into northern South Africa. Its slender spike often occurs in rank grassland where it can be difficult to spot. The

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leaves are long, narrow and erect with a few scattered flowers at the top of the spike. The sepals are narrow, reddish-brown, ending in a small spike. The lateral petals form a broad hood over the labellum, which is three-lobed. The central lobe is long and narrow with a ridged crest, white warty ribs on the axis and shades of purple on the margins. There is a short spur. *Eulophia parviflora* is a more robust plant with long, narrow basal leaves. The inflorescence can be quite dense with large yellowy orange sepals and petals marked internally by dark lines. The lip is yellow and fanshaped. It has a wide distribution from the Eastern Cape into northern South Africa and the Drakensberg.

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Part 2 of this article will appear in JHOS 17 (2) Spring issue

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Spring Meeting & Plant Show Kidlington; Sunday 19th April 2020 Contact Organiser: <u>hosos@hardyorchidsociety.org</u>

Northern Meeting

St. Chad's, Leeds; Saturday 5th September 2020 Contact Organiser: <u>hoson@hardyorchidsociety.org</u>

Autumn Meeting & Photographic Show Kidlington; Sunday 8th November 2020 Contact Organiser: <u>hosos@hardyorchidsociety.org</u>

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