Report of two talks at the meeting of The Meconopsis Group on Saturday 25th October 2014.

Written up by Pat Murphy and checked by Christopher Grey-Wilson

John Mitchell introduced the first speaker of the day Christopher Grey-Wilson, author of the new monograph 'The Genus Meconopsis - Blue poppies and their relatives'. (Published by RBG Kew October 2014) Copies were on sale.

Chris began his first talk of the day by "promising to put the assembled members through it going through the new classification of *Meconopsis"*.
He began by explaining that any monograph is only complete up to the time of publication since new information is continually being introduced.

The new classification described in his book has been based on morphology, but has taken into account DNA work. Work on *Meconopsis* DNA is at an early stage, and more extensive studies, although expensive, need to be done. Many species have still not been looked at properly. Often only one sample has been analysed, possibly leading to erroneous conclusions from very little evidence. An example was given that out of the hundreds of *paniculata* herbarium sheets available, only one has been DNA analysed from a plant in cultivation.

Chris then thanked the many people who had provided photographs, without which the monograph would have been less attractive. From the near 9200 images he had whittled the number down to 560, choosing those that are both beautiful pictures and which also showed species variation.

He outlined the differences between the new classification and George Taylor's published in 1934. First of all this meant removing species that no longer fit within the new circumscription of the genus. *Meconopsis cambrica*, from DNA, morphological and anatomical evidence is not related to the eastern *Meconopsis* species. Calling it by the original name of *Papaver cambricum* as given by Linnaeus (1753) causes problems as it doesn't fit comfortably into *Papaver* which itself is likely to be split into different genera based on DNA and morphological evidence.. Therefore the easiest solution for the time being was to describe a new genus for the Welsh poppy and this is *Parameconopsis,* the sole species being *cambrica* .

Four other anomalous species once in George Taylor's monograph but now placed in the genus *Cathcarthia* are *villosa*, *chelidonifolia*, *oliveriana* and *smithiana*. The last two are not in cultivation. DNA studies show quite clearly that *Cathcarthia villosa* and its allies are in a separate group to the main bulk of Himalayan *Meconopsis*. *C. chelidonifolia* is a scrambling plant, which produces bulbils in its stem axils from which new plants can be grown.

Distribution of the the genus *Meconopsis* is now entirely Sino-Himalayan starting in the west near the Afghan border going through the Himalaya down into south-west China including central and north-eastern and eastern Tibet.

Summary of some Differences in the Monographs

Sir George Taylor 1934	Christopher Grey-Wilson 2014
40 species (now reduced to 35).	79 species (includes 2 natural hybrids)
Two subgenera	Four subgenera
Uneven distribution of species in in the subgenera see the appendix.	For the new distribution of species the subgenera.

Main points of the new classification.

Subgenus Meconopsis includes all the big green evergreen monocarpic species.
Subgenus Discogyne has increased from 2 to 7 species
Subgenus Grandes includes the familiar species of *M*. *grandis*, *M*. *baileyi*, *M. integrifolia* in two series and plus section **Simplifoliae**
Subgenus Cumminsia is the largest and includes all of the smaller species arranged in a number of series. Toshio Yoshida has been responsible for finding seven new species, primarily in south-western China, since he has been able to penetrate different areas of the mountains where no-one else has been. It is likely that more small species may be found, within a limited distribution range, but probably all the larger species have already been discovered.

All of George Taylor's (35) species have been accepted in the new monograph with the exception of *M. longipetiolata* which is a synonym of *M. napaulensis*.

Chris then described the subgenera and sections as outlined in the new monograph showing distribution maps and photos of the species. A summary of some of the main points is given below.

Subgenus Meconopsis (comprises two sections **Meconopsis** and **Polychaetia**).

It includes all the large monocarpic evergreen species of that produce increasingly large rosettes over 2, 3, 4, or more years before producing big candelabra inflorescences which are unique to *Meconopsis* and which are in effect panicles. A lot have been lost in cultivation in their pure forms since they hybridise easily when grown in close proximity.

Section Meconopsis (3 species)

M. regia is restricted to small part in central northern Nepal especially in the Gorhka and Lamjung Himal. It has yellow flowers.
M. taylorii was first described from a ridge on the Fishtail mountain (Macchapuchari) in Nepal. More investigation of its distribution is needed.
M. superba is found in NW Bhutan. It is like *M.regia* but with white flowers and a dark stigma. It is well established in cultivation
All have unlobed leaves with fine toothed margins. The habitat for these species is just above the tree line in scrub and rocky places.

There is a problem since Stainton, Sykes and Williams found a red flowered *M. regia* in several areas. Is this a hybrid or does *M. regia* exist in a red form?

M. paniculata in series Polychaetia also exists in pink and red coloured forms as well as the common yellow-flowered form although red forms are not common.

Section Polychaetia (This comprises two series: **Robustae** and **Polychaetia**).

series Robustae (4 species)

This series contains four small monocarpic evergreen species, one of which *M. chankeliensis* has never been in cultivation and has only recently been photographed in the wild.
M. gracilipes was once common in cultivation until the 1960s and 1970s. It is a graceful plant with yellow flowers.
M. dhwojii has a distinctive maidenhair like leaf adorned with black dots; each bristle has a purple basal wart.
M. robusta. is described as a slender *gracilipes-like meconopsis* with racemes rather than panicles. It is a slight plant about 3 to 4 foot tall found in Kumaon in west Nepal.

series Polychaetia (8 species)

This main series probably contains the plants most familiar to gardeners but they are often muddled in gardens. In the wild the species are distinct in distribution but hybridise easily in gardens. All the species produce attractive
rosettes.

For many years *M. napaulensis* was believed to have red or pink flowers, although the type material for *M. napaulensis* does not mention flower colour. The actual colour wasn't known but it was collected at Gossainkund in central
Nepal. Examining recent photographs in the same area, where all the species have yellow flowers it was clear that the true species has yellow flowers. It produces a candelabra of flowers about 3 to 4 ft tall with ferny leaves
Related to it is *M. ganeshensis* found in Ganesh Himal but with red flowers. It is shorter about 2 ft tall.
Probably the tall monocarpic *M. staintonii* which has red, pink or white flowers in the wild is partly responsible for the wide colour range of hybrids found in gardens today. The species is common in the Kali Gandaki Valley and the areas surrounding the west side of Mt Annapurna. These would have come back frequently to cultivation.

M. wallichii was also once included in *M. napaulensis* although it flowers later. It has a distribution which is further to the east, from east Nepal into Sikkim and western Bhutan. Like the others it is an upper woodland plant growing in mist and flowering during the monsoon. Since it tends to flower later in gardens it keeps its identity as it does not hybridise so readily. It has dainty fruits with long whiskers. There is a red-flowered form called *M wallichii* var*. fuscopurpurea*. The purple and red-flowered forms have not been seen growing together in the wild. They keep their identities in gardens,

In China there is a distinct species *M. wilsonii* named after E.H. (Chinese) Wilson. It is restricted to western and south-western China, just creeping into Burma. There are three subspecies found in three distributional blocks and each with their own characteristics. Subsp *wilsonii* is found in west Sichuan near the town of Moupin. Subsp. *australis*, is found in west and north-west Yunnan. It has narrow panicles, the upper part of which are racemose, the lower parts branched. Only the central flowers normally develop a fruit. Subsp*. orientalis* is leafier with reddish petioles and narrow panicles of flowers, and is confined to NE Yunnan.

M violacea is endemic to north Burma and was found by Frank Kingdon Ward. It was grown well in gardens until the 1950s. The flowers are in racemes, rather than panicles, and are violet-blue, an unusual colour for the genus.
The leaves are neatly lobed.

The most widespread member of this group is *M. paniculata,* which is prolific and very variable. The leaves can vary in dissection and colour (e.g. grey-green or yellow-green), even within a single population. It grows in meadows just above the tree line. It was once thought it only had yellow flowers but pink and red colour forms exist in the wild although these are rare. This may be due to a recessive gene rather than hybridisation.

In West Nepal is a very tall elegant plant with leaves that are coarsely toothed rather than lobed. It doesn't have a stigma with a dark tip, while the leaves are less dissected. It was included in *M. regia* in the 'Flora of Nepal'. It has characteristics of *M. paniculata* and has therefore been re-named as *M.p.* subsp. *pseudoregia*.

Paul Egan discovered another plant named *M. autumnalis* In central Nepal. It has big floppy yellow flowers with a very large stigma.

Subgenus Discogyne. (7 species)

Subgenus DISCOGYNE
Meconopsis psilonomma
Taken at Huanglongsi

All Photographs on this document taken by Christopher Grey- Wilson.

These all have a strange and unique disc on top of the ovary. This is a stigmatic outgrowth from the bottom of stigma which creeps across the top of the ovary. The species have a restricted distribution along the Himalaya creeping into Tibet. They are all high alpine plants, growing well above the tree line in rocky places and moraines and are difficult to cultivate. The leaf rosettes die down in winter to a resting bud, which grows out in spring. They take a long time to flower as the growing season is short. They all produce racemes of flowers; the top flower is the first to open.

M. discigera was the first to be described. It has yellow flowers and is found in eastern Nepal and Sikkim.
M. bhutanica comes from the western half of Bhutan. The petals are semi-translucent and blue.
M. tibetica is a tall elegant plant with a leafy stem. It was found in 1922 by the Everest expedition. It produces a long spike of startling red flowers. It grows at a lower altitude than others in this section.

M. simikotensis from NW Nepal is a tall elegant plant with blue or lilac flowers. The leaves either have slight toothing or are entire.
M. manasluensis is unusual in bearing several racemes from the basal leaf-rosette, each with 3 or 4 flowers on each spike. At RBG Kew there are 4 herbarium sheets of a plant once cultivated at Edinburgh in the 1930s, although the species has only been described recently.

Subgenus Grandes This is split into **Sections Grandes** and **Simplicifoliae.**

Section Grandes This comprises two series: **Grandes** and **Integrifoliae.**

Most people love section **Grandes** more than any other. It includes *M. integrifolia* and all the big blue 'Himalayan poppies'.

series Grandes (4 species)

M. betonicifolia and *M. baileyi* have been confused over the years. *M. baileyi* was described first as a separate species, and then lumped into *M.* b*etonicifolia* by Sir George Taylor because he believed it to be conspecific and it had prior dating.

M. betonicifolia is restricted to north-east Yunnan where it is known at some 17 localities. It has been photographed over the years by a number of people. It is a plant of damp woodlands and other wet areas. The stem leaves are alternate. It has long glabrous fruits, sometimes with a few bristles, and is stoloniferous. The true species may not be in cultivation. Possibly those plants that are in cultivation are all hybrids. The species was brought to Canada by Stanley Ashmore.

M. baileyi can vary a lot in the wild. It is the most commonly grown of all species. In the monograph it is split into three sub species. Subsp. *baileyi* is the plant widely grown in gardens.

M. baileyi subsp*. pratensis* was discovered by Frank Kingdon Ward in northern Burma. It has nodding flowers. *M*. 'Inverewe' is a similar plant which shares many of the same characteristics. Maybe *M*. 'Inverewe' is conspecific with *M. baileyi* subsp. *pratensis*.

M.baileyi subsp*. multidentata* from SE Tibet and NE Arunachal Pradesh has long thin leaves. The leaves are like betony.

M. grandis has been split into three subspecies in the monograph, but in the future there could be a case for splitting them into separate species.

The subspecies have had a huge effect on the big blue poppies in cultivation. Subsp*. grandis* with its narrow leaves could have influenced the formation of hybrids like *M*. 'Slieve Donard' while the plants in the George Sherriff Group could have originated from subsp*.orientalis* which has broad leaves and bracts. Good DNA work is needed on wild specimens, then it may be possible to analyse the cultivated plants properly.

M. grandis subsp*. grandis* grows in yak pastures in E. Nepal and Sikkim. The flowers may be a muddy purple, deep blue or wine-purple.

In western Nepal there is a small plant named *M. grandis* subsp*. jumlaensis*. It is about 30 to 50cm tall with solitary flowers. The pollen structure is different from the other subspecies.

M. grandis subsp*. orientalis* is found in NE Bhutan creeping into Tibet. It is a big bold plant with broad leaves. Ludlow and Sherriff sent back seed from this area including GS600. The flowers are big and floppy with substantial leaves . As is well known the flowers of 'Barneys Blue' change from purple to blue. A photograph was shown of this occurring in a wild plant.

M. sherriffii. This has been in cultivation from time to time. It forms substantial big perennial clumps and has a restricted distribution in Bhutan, plus two localities in Tibet.

series Integrifoliae (4 species)

Series Integrifoliae
Meconopsis integrifolia
subsp. integrifolia

Series Integrifoliae
Meconopsis sulphurea
subsp. sulphurea

Plants in this series have yellow flowers, They can be very small or tall plants to 1.5m high with various shapes and positions of flowers in the inflorescences.

M. integrifolia This grows in upper scrub zone to alpine moorland meadows. The solitary globe-shaped flowers are borne on the stem with petals that curve inwards. They have strongly marked three-veined leaves. The fruit capsule has no style.

Further south in western Sichuan and eastern Tibet, the style is slightly more elongate while the slightly nodding flowers face sideways. This is *M. integrifolia* subsp. *souliei*. The leaves have three parallel veins.

Much further south with buttercup yellow open flowers is *M. lijangensis*. There are dark hairs on the ovaries and fruits. The leaves do not have three veins.

M. pseudointegrifolia. These are very short plants, 18 to 30cm tall. The flowers are often solitary with a distinct style. The leaves are very hairy. This is the true *M. pseudointegrifolia*.

M. sulphurea. In gardens a much taller, elegant plant up to 1.5m tall, has also been known as *M. pseudointegrifolia*. This is a different species and has now been given the new name of *M. sulphurea*. It has big open nodding flowers with a long style. In addition the leaves are pinnately veined. In cultivation it can behave as a biennial. Sometimes the flowers are creamy coloured. It is widespread in NW Yunnan, southern Sichuan, southern Tibet and east of Lhasa. It has a winter resting bud, which is often covered with snow, then the bud grows out again in the spring. It occurs in various colour forms sometimes creamy, sometimes yellow. The anthers can be dark or yellow. Often anther colour was used as a diagnostic feature but the colour may be different in the same plant before and after pollination.

Section Simplicifoliae. This comprises two series: **Simplicifoliae** and **Puniceae**.

series Simplicifoliae (2 species plus 1 naturally occurring hybrid)

There are two main species in this series. One is a tall dainty plant with pinky, scapose flowers, found in Nepal and Bhutan in the upper forest zone. It is like a giant harebell with flowers 4 – 5 inches across. This is *M. simplicifolia* subsp*. simplicifolia.*
The other has a substantial rosette resulting in a more substantial plant. This is *M. simplicifolia* subsp *grandiflora.* It has dark fruits with long lines of bristles. Sir George Taylor thought it the most beautiful species of *Meconopsis*. The flowers are scapose. It may have been involved in the parentage of some of the hybrids found in gardens.

The Chinese have described another species *M. nyingchiensis* about which little is known. It has been photographed along the Tibetan highway and may be a hybrid. Instead of having a style it has four or five ovary flaps which fold across each other.

Series Puniceae (2 species plus 1 naturally occurring hybrid)

Section Simplcfifoliae
Series Puniceae
Meconopsis quintuplinervia

Photographs of *M punicea* and *M. quintuplinervia* and their naturally occurring sterile hybrid *M. x cookei* were shown. Both species are variable in the wild. It was suggested that some of the darker forms of *M. quintuplinervia* would be good introductions to cultivation. Some *M. quintuplinervia* are dwarf plants while others are tall.

Second Talk

The afternoon talk was on **Subgenus Cumminsia**, which is almost half the genus. It has been divided into many sections. This subgenus covers all the small species.

Section Aculeatae (4 species)

Nearly all of these are bristly.

M aculeata is seen in many habitats, gullies, ditches meadows, shrubberies rocky places, It is widespread in moist places from Pakistan to Kashmir and N India. It is variable with small and big plants often growing side by side.
M. latifolia from north Kashmir is sweetly scented. It was once commonly grown and did particularly well in the 1930s. It was reported that it produced little seed in cultivation which could

account for its decline in gardens. It has long spikes of sky blue flowers with broad scarcely dissected leaves.
M. neglecta is only known from one specimen collected on the Afghan frontier inside Pakistan.
M. speciosa is found in SE Tibet and NW Yunnan. Maybe this could be put into a different section. It has tall spikes of flowers and small lobed leaves. The colour varies from white to pale blue. Unlike most *Meconopsis* it is scented, reminiscent of hyacinth. It grows in rocky boulder scree.

There are three subspecies of *M. speciosa*: subsp. *speciosa*, subsp. *cawdoriana*, and subsp. *yulonxueshanensis.*

Section Racemosae. This comprises two series: **Racemosae** and **Heterandrae**.

series Racemosae. (9 species)

Meconopsis racemosa
Taken near Longriba

Meconopsis horridula
subsp *horridula*
Taken at Baran Khola

The next group of plants includes the most problematic of all *Meconopsis*, namely *M. horridula*. Plants named *horridula* ranged from dwarf plants with upright flowers to plants over 1m tall with spikes. Now we have a series of species including *M. prainiana*, *M. racemosa*, and *M. prattii*, all found in discrete areas in the wild.

M. horridula has an enormous distribution. Nepal and SE Tibet. It is immensely variable. It has sharply bristly leaves mostly scapose flowers, but the central scapes can be fused, the traces from each pedicel being separate all the way down. It is the highest growing meconopsis, up to 19,500 feet in bleak moraines and screes of the Himalaya. At very high altitudes it is a very dwarf plant. The colour of flowers ranges from pale blues to deep blues to purples. The fruits are spiny and it has very bristly scapes. It is difficult to maintain in cultivation. One account is of someone who grew it in pots, potted on the pots for several years and eventually had 5 or 6 flowering plants in the pot. This may be the way to grow it.

In the centre of Bhutan is *M. horridula* subsp. *drukyulensis* which has lobing on the leaves, and very large flowers. The warts on the leaves are pale greenish yellow. This sub species is named after the local name for Bhutan.

Around Lhasa is a small delicate plant with long slender scapes with ascending flowers. This is *M. lhasaensis*. It has softer bristles.
A lot of the racemose horridulas were thought to be *M. horridula* subsp *racemosa* but they appear to be quite distinct. They occur in several areas.
M. racemosa is a northern plant with deep colours and long leaves. It is not as bristly as true *M. horridula*.
M. prattii is like racemosa but has secund inflorescences which means the flowers tend to point in one direction. It is found in SE Tibet, NW Yunnan and SW Sichuan.

The ' *M. horridula* of cultivation' are probably hybrids of either *M. racemosa* and *M. prattii*. They are easier to grow than true *M. horridula* and can seed themselves around as they do at Branklyn Botanic Gardens.
Two other species, *M. zhongdianensis* and *M. prainiana* have also caused confusion in the past as people thought they were the same thing.

M. zhongdianensis grows in roadside rubble and old quarries in MW Yunnan. It is a big, robust plant up to 1.2 m tall growing below the tree line so it might be amenable to cultivation. It has very leafy stems and lots of flowers, up to 30 flowers in a spike with creamy or golden anthers. It is quite bristly with curly leaves.

The Tibetan and NE Indian *M. prainiana* has few upright leaves with small stem leaves, about 60 - 90 cm tall. It has pale cream or yellow or white flowers. The different coloured forms grow separately. It is not in cultivation. It is the same as George Taylor's var. *lutea* of *horridula*.

M. rudis. This is found on the Lijiang mountains and in SE Sichuan where it grows on limestone. It produces a lovely rosette of glaucous leaves. There are warts on the leaves with bristles coming out of the dark centres. The species produces short racemes of flowers that are either pure blues, pinkish blues or purples.

M. bijiangensis was discovered by Toshio Yoshida. It has stiff long leaves like those of the hart's-tongue fern, with or without spots. It is monocarpic with dainty flowers; is very prickly and always grows in rock crevices

M. georgei. The original description of the species gave it sulphur yellow flowers. Toshio Yoshida found it with red flowers, (var. *castanea*). There are parallel collections describing the flowers as red or yellow, all from the same spot.

series Heterandrae. (2 species)

Series Heterandrae
Meconopsis balangensis
Taken at Balangshan

The two species in this series have inflated inner filaments, the outer ones are linear. The filaments in most *Meconopsis* are all linear.

M. balangensis grows on the Balangshan to 15,000/16000 feet in western Sichuan. It has spotty leaves and racemes of flowers. The inner two whorls of stamens are inflated and cover the ovary. There are two colour forms which grow on different sides of the mountain.

M. heterandra is a similar but scapose plant with slightly lobed leaves. It is a localised species growing in rock crevices close to the town of Mianning. The word *heterandra* means “different types of stamen”.

Section Impeditae This comprises three series: **Impeditae**, **Henricanae** and **Delavayanae**.

Series Henricanae
Meconopsis sinomaculata
Taken at Huanglongsi

Series Delavayanae
Meconopsis delavayi
Taken at Gangeba

This section contains many of the smaller species found on higher mountains in south-eastern Tibet, northern Burma and south-western China. Their distributions overlap although they tend not to grow together.

series Impeditae. (7 species)

M. impedita and *M. concinna* were once considered to be the same species by Sir George Taylor.
M impedita. It has undulating leaves with pendant flowers. The fruit is at first pendant then vertical.
M. xiangchengensis. Little is known of this species. It is found on either side of the Sichuan-Yunnan border.
M. concinna has entire leaves or neatly lobed leaves and simple four petalled flowers. All have a tuber underground.
M. muscicola which means growing in mossy areas. A little known species.
Collected by Rock and Forrest. Once put into *lancifolia* and only recently recognised.
M. pulchella is very small. It has spotty or non-spotty leaves and is found in rock crevices in western Sichuan. It is slender monocarpic plant.
M. venusta, The flowers have four pale petals and long thin fruits.
M. pseudovenusta has more petals and short stubby fruits. To succeed in cultivation it may need to be sandwiched between rocks.

Both *M venusta* and *M pseudovenusta* grow in limestone screes.

series Henricanae. (3 species)

Members of this group all have slightly dilated (expanded) filaments. Their distributions overlap. *M. henrici* in Kangding, then *M. psilonomma* further north into southern Gansu, with *M. sinomaculata* overlapping in the north.

M. henrici tends to have a rosette with 8, 9, or 10 flowers in succession. The anthers are bright yellow.
M. psilonomma has buff coloured anthers. It usually has one single flower about 4-5 inches across borne on a stout scape.
M. sinomaculata has big floppy flowers with a characteristic dark blotch at the base of petals.

series Delavayanae. (1 species)

M. delavayi is in cultivation. It is found in Lijiang. It is the only perennial in this subgenus apart from *M. bella*. Sandwiching the tubers between rocks in troughs is a good technique. The flowers are more violet than blue.

Section Forrestianae. (3 species)

M. forrestii is the most delicate of all *Meconopsis* with a spindly, leafless stem, with 2 or 3 small flowers. It has slender strictly erect fruit capsules and is about 20-30 cm high.
M. yaoshanensis has upright fruiting stems and long tapered leaves. It comes from NE Yunnan.

M. lancifolia subsp*. lancifolia* is a delicate plant from the Muli region of S Sichuan and collected there by Joseph Rock. It hasn't been seen in recent years.
M. lancifolia subsp*. eximia* has a wider distribution to the west and is a less delicate plant with bigger flowers. *M.lancifolia* subsp*. lepida* collected by Farrer is a much smaller plant and is found much farther north in Gansu.

Section Cumminsia. This comprises two series: **Primulinae** and **Cumminsia**.

series Primulinae. (3 species)

There is no information on *M. florindae*
M. argemonantha has white or yellow flowers and is a rare localised species from SE Tibet.
M. primulina is a small species with blue or purplish flowers It is found in W. Bhutan in rocky places and would be a delight to have in cultivation.

series Cumminsia. (9 species)

These species are all closely related mostly rather insignificant species with scattered distributions; they are all isolated from each other. Most bear rather pale lilac or pinkish purple, occasionally deeper purple-blue flowers

M. bulbilifera is extremely delicate with thread-like stems bearing tiny bulbils in the leaf axils. It is found in east Nepal.
M. lyrata from Sikkim.
M. exilis found in N.W Yunnan. It has a spindly stem
M. polygonoides a delicate plant from Bhutan
M. wumungensis NE Sichuan
M. compta SE Tibet solitary flowers and neatly lobed leaves.
M. ludlowii from Bhutan; a recently described species.

M. sinuata has sinuate leaves and racemes bearing several flowers.
M. lamjungensis is restricted to central Nepal and is little known and under-collected.

Section Bellae. (1 species)

This has been divided into three subspecies. two in Nepal and one in Bhutan.

Subsp. *bella* has neatly dissected leaves and big saucer shaped flowers. It is found in central and eastern Nepal, Sikkin and western Bhutan.

Subsp. *grandifolia* has large leaves and is restricted to a small area of central-western Nepal.

Subsp. *integrifolia* is found in Bhutan and neighbouring Tibet.

John thanked Chris for coming from the south to give The Meconopsis Group two wonderful presentations on his book and for signing copies of it which were on sale as well.