

## ***Meconopsis* Type Specimens at RBGE**

by Al Elliott at The *Meconopsis* Group meeting on 20 November 2010

A Type specimen is a preserved collection of plant material that is used as a reference point when a new taxon is described for the first time. These specimens can be dried and pressed, stored in preserving fluid or an illustration. The specimens are deposited in one or more Herbaria around the world to allow other researchers to see particular characters, and features described by the original author. These specimens should always be referenced when taxonomic work is being done.

A Type specimen is properly known as a Nomenclatural Type as it attaches a name to a taxon. Once a Type specimen is designated it remains a Type regardless if that name is the accepted name or reduced to synonymy. A Type should represent the original author's concept of a taxon but it doesn't necessarily represent an ideal example of a taxon because people's idea of "what a species is" can expand and contract with new information and ideas.

For example, when *Meconopsis horridula* was described for the first time by Joseph Hooker and Thomas Thomson in *Flora India* (1855) it was described as having multiple single flowering scapes, with entire lanceolate leaves. The original description is reflected exactly in the Type specimen at Kew. This can be compared with George Taylor's concept of *M. horridula* by simply looking at the list of synonyms in his Monograph. The huge variety of forms that Taylor considered *M. horridula* is not reflected in the Type specimen, but should be reflected in the Types that belong to the synonyms.

By creating high resolution scans of the specimens they can be accessed by institutional catalogues, <http://www.rbge.org.uk/databases>, or centrally at Jstor

Plants, <http://plants.jstor.org/>, is to allow these collections to be accessed by scientists in developing countries where the cost of visiting countries where there specimens are stored is prohibitive.

The Royal Botanic Garden Edinburgh has one of the finest Sino-Himalayan collections and as a result the herbarium and Type collection of *Meconopsis* is one of the most representative and is still growing.

Edinburgh has Type material of some of the most recently published taxa:

- *Meconopsis autumnalis* P.A.Egan,
- *Meconopsis manasluensis* P.A.Egan,
- *Meconopsis grandis* Prain ssp. *jumlaensis* Grey-Wilson,
- *Meconopsis bijiangensis* H.Ohba , Tosh.Yoshida & H.Sun,
- *Meconopsis castanea* H.Ohba, Tosh.Yoshida & H.Sun

Institute	Taxa	Specimens
Edinburgh	42	72
Kew	32	82
Paris	23	33+
BM	16	39
Calcutta	13	?
Geneva	6	?
Wien	6	?
Harvard	4	4
Berlin	3	?
Firenze	3	?
München	3	?
G-Boiss.	1	?
Uppsala	1	?
Manchester	1	?
Liverpool	1	?
Saint Petersburg	???	?

## Collectors

The *Meconopsis* Type collection is representative of many of the most well known and historically important plant collectors. Unsurprisingly the largest collections of Types are from George Forrest from his important expeditions in China.

Collector	Type Collection of
Delavay, Pierre Jean Marie	<i>Cathcartia lancifolia</i> Franch. <i>Meconopsis lancifolia</i> (Franch.) Franch. ex Prain
Dhwoj, Lall (Major)	<i>Meconopsis regia</i> G.Taylor
Dungboo	<i>Meconopsis superba</i> King ex Prain
Farrer, Reginald	<i>Meconopsis psilonomma</i> Farrer <i>Meconopsis lepida</i> Prain
Forrest, George	<i>Meconopsis compta</i> Prain <i>Meconopsis concinna</i> Prain <i>Meconopsis lancifolia</i> (Franch.) Franch. ex Prain var. <i>concinna</i> (Prain) G.Taylor <i>Meconopsis eximia</i> Prain <i>Meconopsis forrestii</i> Prain <i>Meconopsis georgei</i> G.Taylor <i>Meconopsis impedita</i> Prain <i>Meconopsis pseudointegrifolia</i> Prain ssp. <i>daliensis</i> Grey-Wilson <i>Meconopsis pseudovenusta</i> G.Taylor <i>Meconopsis speciosa</i> Prain <i>Meconopsis venusta</i> Prain <i>Meconopsis wilsonii</i> Grey-Wilson ssp. <i>australis</i> Grey-Wilson
Ganesh Himal, Central Nepal Expedition (1994)	<i>Meconopsis autumnalis</i> P.A.Egan
Handel-Mazzetti, H.	<i>Meconopsis ouvrardiana</i> Hand.-Mazz. <i>Cathcartia smithiana</i> Hand.-Mazz. <i>Meconopsis smithiana</i> (Hand.-Mazz.) G.Taylor ex Hand.-Mazz.
Ikeda, H.; Kawahara, T.; Yano, O.; Watson, M.F.; Li, Z.H.; Subedi, M.N.; Acharya, S.K	<i>Meconopsis manasluensis</i> P.A.Egan
Kingdon-Ward, F.	<i>Meconopsis impedita</i> Prain <i>Meconopsis prainiana</i> Kingdon-Ward <i>Meconopsis cawdoriana</i> Kingdon-Ward <i>Meconopsis florindae</i> Kingdon-Ward
Ludlow, F. & Sherriff, G.	<i>Meconopsis horridula</i> Hook.f. & Thomson var. <i>lutea</i> G.Taylor <i>Meconopsis sherriffii</i> G.Taylor
Ludlow, Frank; Sherriff, George & Taylor, George	<i>Meconopsis argemonantha</i> Prain var. <i>lutea</i> G.Taylor
Maire, E.E.	<i>Meconopsis impedita</i> Prain
Polunin, Oleg; Sykes, William & Williams, John	<i>Meconopsis grandis</i> Prain ssp. <i>jumlaensis</i> Grey-Wilson
Potanin, G.N.	<i>Meconopsis punicea</i> Maxim.
Przewalski, Nikolai M.	<i>Cathcartia integrifolia</i> Maxim.
Rock, Joseph F.	<i>Meconopsis integrifolia</i> (Maxim.) Franch. var. <i>lijiangensis</i> Grey-Wilson
Sino-British Lijiang Expedition	<i>Meconopsis pseudointegrifolia</i> Prain ssp. <i>robusta</i> Grey-Wilson

Sino-British Qinghai Alpine Garden Society Expedition	<i>Meconopsis sinomaculata</i> Grey-Wilson
Soulie, R.P.	<i>Meconopsis integrifolia</i> (Maxim.) Franch. var. <i>souliei</i> Fedde
Stainton, J.D.Adam; Sykes, William & Williams, John	<i>Meconopsis staintonii</i> Grey-Wilson
	<i>Meconopsis taylorii</i> L.H.J.Williams
Stainton, John David Adam	<i>Meconopsis ganeshensis</i> Grey-Wilson
Taggart, James	<i>Meconopsis wilsonii</i> Grey-Wilson ssp. <i>orientalis</i> Grey-Wilson, D.W.H. Rankin & Z.K. Wu
Wallich, N.	<i>Meconopsis napaulensis</i> DC. <i>Papaver paniculatum</i> D.Don: <i>Meconopsis wallichii</i> Hook.
Wallich, Nathaniel	<i>Meconopsis robusta</i> Hook.f. & Thomson
Wilson, Ernest Henry	<i>Meconopsis wilsonii</i> Grey-Wilson <i>Meconopsis wilsonii</i> Grey-Wilson ssp. <i>wilsonii</i>
Yoshida	<i>Meconopsis bijiangensis</i> H.Ohba , Tosh.Yoshida & H.Sun <i>Meconopsis castanea</i> H.Ohba, Tosh.Yoshida & H.Sun

## Synonymy

As several taxa are no longer accepted or the particular taxonomy has not been adopted it is essential to record names that are annotated and recorded as Type material. Below is a list of accepted names at RBGE with Type material filed as synonyms under that accepted name. The synonymy of names can be for a number of reasons.

*Meconopsis speciosa* Prain which is currently the RBGE's accepted name has *Meconopsis cawdoriana* Kingdon-Ward & *Meconopsis ouvrardiana* Hand.-Mazz. listed as synonyms. These synonyms are based on Taylor's revision in his monograph but also by subsequent authors working on the Flora of China upholding his taxonomy.

At the moment RBGE has not adopted Grey-Wilson's revision of *Meconopsis integrifolia* (Maxim.) Franch. & *Meconopsis pseudointegrifolia* Prain. The two species are considered synonymous and the institution does not recognise any of the subspecies or varieties.

Conversely RBGE has adopted Grey-Wilson's recent revision of *M. grandis* Prain because of the institute's role in the Flora of Nepal and agreeing with Grey-Wilson's taxonomic treatment.

Current Accepted Name	Types specimens under the Accepted name
<i>Meconopsis argemonantha</i> Prain	<i>Meconopsis argemonantha</i> Prain var. <i>lutea</i> G.Taylor
<i>Meconopsis autumnalis</i> P.A.Egan	<i>Meconopsis autumnalis</i> P.A.Egan
<i>Meconopsis bijiangensis</i> H.Ohba , Tosh.Yoshida & H.Sun	<i>Meconopsis bijiangensis</i> H.Ohba , Tosh.Yoshida & H.Sun
<i>Meconopsis castanea</i> H.Ohba, Tosh.Yoshida & H.Sun	<i>Meconopsis castanea</i> H.Ohba, Tosh.Yoshida & H.Sun
<i>Meconopsis florindae</i> Kingdon-Ward	<i>Meconopsis florindae</i> Kingdon-Ward
<i>Meconopsis forrestii</i> Prain	<i>Meconopsis forrestii</i> Prain

<i>Meconopsis ganeshensis</i> Grey-Wilson	<i>Meconopsis ganeshensis</i> Grey-Wilson
<i>Meconopsis georgei</i> G.Taylor	<i>Meconopsis georgei</i> G.Taylor
<i>Meconopsis grandis</i> Prain ssp. <i>jumlaensis</i> Grey-Wilson	<i>Meconopsis grandis</i> Prain ssp. <i>jumlaensis</i> Grey-Wilson
<i>Meconopsis henrici</i> Bureau & Franch. var. <i>psilonomma</i> (Farrer) G.Taylor	<i>Meconopsis psilonomma</i> Farrer
<i>Meconopsis horridula</i> Hook.f. & Thomson	<i>Meconopsis horridula</i> Hook.f. & Thomson var. <i>lutea</i> G.Taylor
<i>Meconopsis impedita</i> Prain	<i>Meconopsis prainiana</i> Kingdon-Ward
<i>Meconopsis integrifolia</i> (Maxim.) Franch.	<i>Meconopsis impedita</i> Prain
	<i>Cathcartia integrifolia</i> Maxim.
	<i>Meconopsis integrifolia</i> (Maxim.) Franch. var. <i>lijiangensis</i> Grey-Wilson
	<i>Meconopsis integrifolia</i> (Maxim.) Franch. var. <i>souliei</i> Fedde
	<i>Meconopsis pseudointegrifolia</i> Prain ssp. <i>daliensis</i> Grey-Wilson
	<i>Meconopsis pseudointegrifolia</i> Prain ssp. <i>robusta</i> Grey-Wilson
<i>Meconopsis lancifolia</i> (Franch.) Franch. ex Prain	<i>Cathcartia lancifolia</i> Franch.
	<i>Meconopsis lancifolia</i> (Franch.) Franch. ex Prain
<i>Meconopsis lancifolia</i> (Franch.) Franch. ex Prain var. <i>concinna</i> (Prain) G.Taylor	<i>Meconopsis concinna</i> Prain
	<i>Meconopsis lancifolia</i> (Franch.) Franch. ex Prain var. <i>concinna</i> (Prain) G.Taylor
<i>Meconopsis lancifolia</i> (Franch.) Franch. ex Prain var. <i>solitariifolia</i> Fedde	<i>Meconopsis eximia</i> Prain
	<i>Meconopsis lepida</i> Prain
<i>Meconopsis lyrata</i> (H.A.Cummins & Prain ex Prain) Fedde ex Prain	<i>Meconopsis compta</i> Prain
<i>Meconopsis manasluensis</i> P.A.Egan	<i>Meconopsis manasluensis</i> P.A.Egan
<i>Meconopsis pseudovenusta</i> G.Taylor	<i>Meconopsis pseudovenusta</i> G.Taylor
	<i>Meconopsis venusta</i> Prain
<i>Meconopsis punicea</i> Maxim.	<i>Meconopsis punicea</i> Maxim.
<i>Meconopsis regia</i> G.Taylor	<i>Meconopsis regia</i> G.Taylor
<i>Meconopsis robusta</i> Hook.f. & Thomson	<i>Meconopsis robusta</i> Hook.f. & Thomson
<i>Meconopsis sherriffii</i> G.Taylor	<i>Meconopsis sherriffii</i> G.Taylor
<i>Meconopsis sinomaculata</i> Grey-Wilson	<i>Meconopsis sinomaculata</i> Grey-Wilson
<i>Meconopsis smithiana</i> (Hand.-Mazz.) G.Taylor ex Hand.-Mazz.	<i>Cathcartia smithiana</i> Hand.-Mazz.
	<i>Meconopsis smithiana</i> (Hand.-Mazz.) G.Taylor ex Hand.-Mazz.
<i>Meconopsis speciosa</i> Prain	<i>Meconopsis cawdoriana</i> Kingdon-Ward
	<i>Meconopsis ouvardiana</i> Hand.-Mazz.
	<i>Meconopsis speciosa</i> Prain
<i>Meconopsis staintonii</i> Grey-Wilson	<i>Meconopsis staintonii</i> Grey-Wilson
<i>Meconopsis superba</i> King ex Prain	<i>Meconopsis superba</i> King ex Prain
<i>Meconopsis taylorii</i> L.H.J.Williams	<i>Meconopsis taylorii</i> L.H.J.Williams
<i>Meconopsis venusta</i> Prain	<i>Meconopsis venusta</i> Prain
<i>Meconopsis wallichii</i> Hook.	<i>Meconopsis napaulensis</i> DC.
	<i>Papaver paniculatum</i> D.Don
	<i>Meconopsis wallichii</i> Hook.
<i>Meconopsis wilsonii</i> Grey-Wilson ssp. <i>australis</i> Grey-Wilson	<i>Meconopsis wilsonii</i> Grey-Wilson ssp. <i>australis</i> Grey-Wilson
<i>Meconopsis wilsonii</i> Grey-Wilson ssp. <i>orientalis</i> Grey-Wilson, D.W.H. Rankin & Z.K. Wu	<i>Meconopsis wilsonii</i> Grey-Wilson ssp. <i>orientalis</i> Grey-Wilson, D.W.H. Rankin & Z.K. Wu

<i>Meconopsis wilsonii</i> Grey-Wilson ssp. <i>wilsonii</i>	<i>Meconopsis wilsonii</i> Grey-Wilson <i>Meconopsis wilsonii</i> Grey-Wilson ssp. <i>Wilsonii</i>
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## Types by Country of Origin

As *Meconopsis* has its centre of distribution in China and then extends westward along the Himalaya, this is again reflected in RBGE's collection.

Country of Origin	Name of Type
China	<i>Cathcartia integrifolia</i> Maxim. <i>Cathcartia lancifolia</i> Franch. <i>Meconopsis lancifolia</i> (Franch.) Franch. ex Prain <i>Cathcartia smithiana</i> Hand.-Mazz. <i>Meconopsis smithiana</i> (Hand.-Mazz.) G.Taylor ex Hand.-Mazz. <i>Meconopsis argemonantha</i> Prain var. <i>lutea</i> G.Taylor <i>Meconopsis bijiangensis</i> H.Ohba, Tosh.Yoshida & H.Sun <i>Meconopsis castanea</i> H.Ohba, Tosh.Yoshida & H.Sun <i>Meconopsis cawdoriana</i> Kingdon-Ward <i>Meconopsis compta</i> Prain <i>Meconopsis concinna</i> Prain <i>Meconopsis lancifolia</i> (Franch.) Franch. ex Prain var. <i>concinna</i> (Prain) G.Taylor <i>Meconopsis eximia</i> Prain <i>Meconopsis florindae</i> Kingdon-Ward <i>Meconopsis forrestii</i> Prain <i>Meconopsis georgei</i> G.Taylor <i>Meconopsis horridula</i> Hook.f. & Thomson var. <i>lutea</i> G.Taylor <i>Meconopsis impedita</i> Prain <i>Meconopsis integrifolia</i> (Maxim.) Franch. var. <i>lijiangensis</i> Grey-Wilson <i>Meconopsis integrifolia</i> (Maxim.) Franch. var. <i>souliei</i> Fedde <i>Meconopsis lepida</i> Prain <i>Meconopsis ouvardiana</i> Hand.-Mazz. <i>Meconopsis prainiana</i> Kingdon-Ward <i>Meconopsis pseudointegrifolia</i> Prain ssp. <i>daliensis</i> Grey-Wilson <i>Meconopsis pseudointegrifolia</i> Prain ssp. <i>robusta</i> Grey-Wilson <i>Meconopsis pseudovenusta</i> G.Taylor <i>Meconopsis psilonomma</i> Farrer <i>Meconopsis punicea</i> Maxim. <i>Meconopsis sherriffii</i> G.Taylor <i>Meconopsis sinomaculata</i> Grey-Wilson <i>Meconopsis speciosa</i> Prain <i>Meconopsis superba</i> King ex Prain <i>Meconopsis venusta</i> Prain <i>Meconopsis wilsonii</i> Grey-Wilson ssp. <i>australis</i> Grey-Wilson <i>Meconopsis wilsonii</i> Grey-Wilson ssp. <i>orientalis</i> Grey-Wilson, D.W.H. Rankin & Z.K. Wu <i>Meconopsis wilsonii</i> Grey-Wilson <i>Meconopsis wilsonii</i> Grey-Wilson ssp. <i>Wilsonii</i>
India	<i>Meconopsis robusta</i> Hook.f. & Thomson
Nepal	<i>Meconopsis autumnalis</i> PA..Egan <i>Meconopsis ganeshensis</i> Grey-Wilson <i>Meconopsis grandis</i> Prain ssp. <i>jumlaensis</i> Grey-Wilson

*Meconopsis manasluensis* P.A.Egan  
*Meconopsis napaulensis* DC  
*Papaver paniculatum* D.Don:  
*Meconopsis wallichii* Hook.  
*Meconopsis wallichii* Hook.  
*Meconopsis regia* G.Taylor  
*Meconopsis staintonii* Grey-Wilson  
*Meconopsis taylorii* L.H.J.Williams