

Records of Bhutan Rhododendrons Found by Ludlow and Sherriff in 1937

BY

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Rhododendrons of Bhutan and Tibet collected by Ludlow and Sherriff in 1936, the subject of a paper in the preceding number of these Notes, is now supplemented by an account of the species which they found in Southern and Central Bhutan in 1937.

So little is known of the flora of these regions that, although no new species of Rhododendron were found, the record of their discoveries is an important one. It shows that (with very few exceptions) the Rhododendrons of this area are typically Himalayan—the well-known species of Sikkim and Bhutan. The two species which are not typically Himalayan are *Rh. phaedropum*, which was discovered by Farrer in N.E. Upper Burma in 1920 and was previously recorded from S.E. Tibet by Ludlow and Sherriff in 1936, and *Rh. magnificum*, described by Ward and found by him in Burma near the Tibetan frontier in 1931. Although *Rh. phaedropum* is now recorded, *Rh. neriiflorum*, which was found by Ludlow and Sherriff in S.E. Tibet in 1936, is not in the following list.

There are, however, several other plants in the present collection which are worthy of special remark.

The rediscovery of *Rh. Batemanii*, first found by Booth in Bhutan about 1848, is extremely interesting. We have known it only as a plant described and figured (Bot. Mag. 5387) after it had been raised and flowered at Kew from seed sent home to Mr. Nuttall by Booth. It is exceedingly rare in cultivation.

Next, mention should be made of an unusual form of *Rh. Thomsonii* with pink flowers and a small calyx, described by Sir J. Hooker in "The Rhododendrons of Sikkim-Himalaya" as *Rh. candelabrum* (now regarded as a variety of *Rh. Thomsonii*). This is an outstanding plant.

Further, in two instances, we have interesting evidence of the occurrence of species at the extreme eastern end of the Himalayan Range, which have been supposed to be confined to the west. A non-bristly form of *Rh. barbatum* (*Rh. imberbe*) is recorded from Central Bhutan, and it would, therefore, appear that the one specific name might well include both types. Secondly, it is clear that the N.W. Himalayan form of *Rh. anthopogon*, distinguished by persisting bud scales and known as *Rh. hypenanthum*, is not confined to the west but appears also in the drier parts of Bhutan. The distinction between these two [Notes, R.B.G., Edin., No. XCV, July 1938.]

species is not one on which much reliance can be placed, but the persistent bud scales, which are probably an adaptation to drier conditions, are not found only on plants in the west.

The field notes which accompany all the specimens give carefully prepared descriptive detail, but since most of the species are quite well known I have given, as a rule, only the date, locality and number, sufficient to establish these new records of distribution. Only in one or two instances are the notes quoted in full, but any information of special interest has been used.

Like the previous one, the 1937 expedition was under the auspices of the British Museum (Natural History), and again for the loan of material I am indebted to Mr. J. Ramsbottom, Keeper of Botany.

ANTHOPOGON SERIES.

Rh. anthropogon D. Don

Common on open hillsides in Central Bhutan and represented by Nos. 3082, 3217, 3400.

Rh. hypenanthum Balf. f.

"Central Bhutan, Tang Chu, Ritang. Alt. 14-15,000 feet. Shrub 1-2 ins. high. Corolla white to pink, tube hairy at the throat. Filaments and style inserted, glabrous. Calyx leafy, lobes fringed with hairs. Leaves, upper surface dull green covered with long white hairs; lower surface covered with rough, brown, coarse tomentum. Creeping along rocks and on rocky thin soil. Open hillside. 7th June 1937. No. 3216."

"Central Bhutan, Rinchen Chu (Chore). Alt. 15,500 feet. Shrub 2-4 ins. Corolla pale pink, tube hairy, style and filaments inserted, glabrous. Calyx large, pink, hairy on margins of lobes. Leaves, upper surface shiny green; lower surface covered with rough brown scales; margins hairy. Crawling over rocks. Open hillside. 13th June 1937. No. 3428."

When *Rh. hypenanthum* was described it appeared to be confined to the North-West Himalaya while *Rh. anthropogon* occurred only in the Eastern Himalaya. Sherriff, however, found *Rh. hypenanthum* in South-East Tibet in 1934 (No. 661) and has now again collected it in Central Bhutan. The two species very closely resemble each other, the main difference being that the bud-scales are persistent on the branchlets in *Rh. hypenanthum* but not in *Rh. anthropogon*. This character together with the wide difference in locality was considered enough to regard these two plants as being distinct species, but now that Sherriff's record shows that both occur in the Eastern Himalaya they may be found to be merely different forms of the same species.

ARBOREUM SERIES**ARBOREUM SUBSERIES.****Rh. arboreum** Sm.

South Bhutan, Jirgang Chu Valley. Alt. 4,500 feet. 30th April 1937. No. 2960.

Central Bhutan, Chendebi-Trongsa road. Alt. 6,000 feet. 11th May 1937. No. 3017.

BARBATUM SERIES.**BARBATUM SUBSERIES.****Rh. barbatum** Wall.

South Bhutan, Jirgang Chu. Alt. 9-10,000 feet. Common among other rhododendrons in the Bamboo zone. 3rd May 1937. No. 2988.

Central Bhutan, Phobsikha. Alt. 12,000 feet. Fairly common in patches in Abies forest. 23rd May 1937. No. 3096.

Both specimens from Bhutan have no bristles on the stem, in other respects they are so like *Rh. barbatum* that they cannot be regarded as a different species. A non-bristly form of *Rh. barbatum* was recorded from the Western Himalayas and when a similar plant appeared in cultivation it was given the specific name *Rh. imberbe*. In view of Sherriff and Ludlow's discovery of similar plants in the East it would seem to be unnecessary to call the two forms by separate names, varietal rank at most would serve to mark the distinction.

Rh. Smithii Nutt. MS. (descript. Hook.).

Central Bhutan, Lamse La. Alt. 10,500-11,500 feet. Common in Abies and Rhododendron forest. 14th May 1937. No. 3049.

CAMELLIAEFLOREM SERIES.**Rh. camelliaeflorum** Hook. f.

This species is often epiphytic, the flowers are pink or rich pink and Sherriff's specimens are from Phobsikha in Central Bhutan. Nos. 3267, 3324.

CAMPANULATUM SERIES.**Rh. aeruginosum** Hook. f.

Central Bhutan, Tang Chu Ritang. Alt. 14,000 feet. 10th June 1937. No. 3244.

The dark magenta coloured flowers of Ludlow and Sherriff's plant suggest that it is this species rather than the closely allied *Rh. campanulatum*.

Rh. campanulatum D. Don

Central Bhutan, Dungshinggang (Black Mountain, north side). Alt. 12,500-13,500 feet. 20th May 1937. No. 3087.

Rh. Batemanii Hook. f.

Central Bhutan, Dungshinggang (Black Mountain, north side). Alt. 13,000 feet. 20th May 1937. No. 3089.

The name *Rh. Batemanii* was given to a plant among those raised from seed collected by Booth in Bhutan. It was described with a figure in the Bot. Mag. (Tab. 5387) after flowering at Kew. When the "Species of Rhododendron" was published so little was known about *Rh. Batemanii* and it appeared to be so like *Rh. campanulatum* that the name was placed in synonymy. Ludlow and Sherriff's No. 3089, although like *Rh. campanulatum*, is a plant with a tomentose ovary and therefore not *Rh. campanulatum*, in which the ovary is glabrous. Since *Rh. Batemanii* has also this distinctive feature recorded in the description and clearly shown in the figure there is no doubt that the name is correctly applied to a distinctive Bhutanese plant, and Ludlow and Sherriff's plant should be called by this name.

Rh. fulgens Hook. f.

Central Bhutan, Byosu La. Alt. 13,500 feet. 18th May 1937. No. 3075.

This specimen lacks the typical indumentum of *Rh. fulgens* but various gatherings by other collectors show the same lack of indumentum.

Central Bhutan, Dungshinggang (Black Mountain). Alt. 13,500 feet. 20th May 1937. No. 3090.

Central Bhutan, Tang Chu, Ritang. Alt. 14,000 feet. 10th June 1937. No. 3239.

Rh. lanatum Hook. f.

Central Bhutan, Phobsikha. Alt. 13,000 feet. 16th June 1937. No. 3063.

From the same locality Ludlow and Sherriff collected another plant (No. 3074) with a pale grey instead of typical bright brown indumentum. Except, however, for the colour of the indumentum the plant does not differ from *Rh. lanatum*.

CINNABARINUM SERIES.**Rh. cinnabarinum** Hook. f.

Central Bhutan, Lamse La. Alt. 10,500-11,500 feet. 14th May 1937. No. 3050.

Rh. Keysii Nutt.

South Bhutan, Jirgang Chu. Alt. 9,500 feet. 5th May 1937. No. 2992.

Central Bhutan, Chendebe. Alt. 8,000 feet. Common. Corolla bright salmon, lobes yellow tinged salmon. 13th May 1937. No. 3039.

EDGEWORTHII SERIES.

Rh. Edgeworthii Hook. f.

South Bhutan, Head of the Gale Chu Valley. Alt. 6,000 feet. 28th April 1937. No. 2952.

Central Bhutan, Mara Chu Valley. Alt. 7,000 feet. 28th April 1937. No. 3132.

It is recorded that this magnificent specimen was growing 70 feet up on a tall *Magnolia* tree.

FALCONERI SERIES.

Rh. eximeum Nutt.

South Bhutan. Jirgang Chu. Alt. 10,000 feet. 3rd May 1937. No. 2989.

This plant is very similar to *Rh. Falconeri* (No. 2983) but the flowers are deep wine coloured without a basal blotch. Sherriff states that this rhododendron replaces the latter at an altitude of 10,000 feet. It may be that his plant is *Rh. eximeum* or possibly only a colour form of *Rh. Falconeri*.

Rh. Falconeri Hook. f.

South Bhutan. Jirgang Chu. Alt. 9-10,000 feet. Very common in wet dense forest growing under *Magnolia Campbelli* and among other rhododendrons. 3rd May 1937. No. 2983.

Central Bhutan, Chendebe. Alt. 8,000 feet. Only one or two trees seen. 13th May 1937. No. 3041.

Rh. Hodgsonii Hook. f.

South Bhutan, Jirgang Chu. Alt. 10,500 feet. Common. 4th May 1937. No. 2990.

Central Bhutan, Lamse La. Alt. 10-12,000 feet. Common. 14th May 1937. No. 3047.

FORTUNEI SERIES.

GRIFFITHIANUM SUBSERIES.

Rh. Griffithianum Wight

Central Bhutan, Chendebe. Alt. 7,500 feet. Corolla pure white. 12th May 1937. No. 3026.

GLAUCUM SERIES.

Rh. glaucum Hook. f.

Central Bhutan, Phobsikha. Alt. 11,000 feet. 23rd May 1937. No. 3095. And on 4th June 1937. No. 3184.

GRANDE SERIES.**Rh. grande** Wight

South Bhutan, Jirgang Chu Valley. Alt. 8,000 feet. Tree 40-50 feet, common in dense wet forest but not below an elevation of 8,000 feet. One tree seen is fully 70 feet high with a girth of 9 feet at 5 feet from the ground. 2nd May 1937. No. 2977.

Rh. magnificum Ward

South Bhutan, Jirgang Chu (South ridge). Alt. 9-10,000 feet. Tree 30-45 feet. Corolla bright pale magenta, deep magenta basal patch. Sweet scented. Ovary covered with fine white tomentum. Calyx fleshy, pink, very small. Leaves up to 32 cms. by 19 cms. Glabrous upper surface, grey white tomentum below. Common among other rhododendrons, in Bamboo zone. 3rd May 1937. No. 2987.

LACTEUM SERIES.**Rh. Wightii** Hook. f.

Central Bhutan, Dungshinggang (Black Mountain). Alt. 13,500 feet. 19th-20th May 1937. Nos. 3081, 3088, 3091.

Central Bhutan; Tang Chu, Ritang. Alt. 14,000 feet. 7th June 1937. No. 3218.

This is apparently a form with a pale pink corolla. Sherriff notes that except for dwarf species it is the highest growing rhododendron.

Central Bhutan, Tang Chu, Ritang. Alt. 14,000 feet. 10th June 1937. No. 3243.

A colour form in which the flowers are pure white with a few red spots. Only about a dozen plants were seen.

LAPPONICUM SERIES.**Rh. setosum** D. Don

Central Bhutan, Tang Chu, Ritang. Alt. 13,000 feet. 8th June 1937. No. 3221.

LEPIDOTUM SERIES.**Rh. Baileyi** Balf. f.

Central Bhutan, Tang Chu, Ritang. Alt. 12,000 feet. Not common. 6th June 1937. No. 3202.

Rh. elaeagnoides Hook. f.

Central Bhutan, Dungshinggang (Black Mountain). Alt. 14,500 feet. Flowers pale yellow. 20th June 1937. No. 3289.

Rh. lepidotum Wall.

Central Bhutan, Phobsikha. Alt. 10,500 feet. 26th May 1937.
No. 3111.

Central Bhutan, Longle Chu. Alt. 10,000 feet. 13th June 1937.
No. 3254.

MADDENII SERIES.**MADDENII SUBSERIES.****Rh. Maddenii** Hook. f.

Central Bhutan, Mara Chu Valley. Alt. 7,000 feet. Very few seen,
grows with *Rh. rhabdotum*. 29th May 1937. No. 3147.

Rh. polyandrum Hutch.

Central Bhutan, Mara Chu Valley. Alt. 8,000 feet. 30th May 1937.
No. 3164.

This specimen is very similar to *Rh. Maddenii* (No. 3147). In No. 3164 the flowers have 23 stamens with hairy filaments, whereas in No. 3147 there are only 20 stamens and the filaments are glabrous. Sherriff notes that No. 3164 (*Rh. polyandrum*) is fairly common, growing with *Rh. arboreum*, whereas No. 3147 (*Rh. Maddenii*) is rare.

MEGACALYX SUBSERIES.**Rh. Lindleyi** T. Moore

South Bhutan, Jirgang Chu. Alt. 8,500 feet. 3rd May 1937. No. 2980.

Rh. rhabdotum Balf. f. et Cooper.

Central Bhutan, Mara Chu Valley. Alt. 8,000 feet. 28th May 1937.
No. 3136.

Sherriff records that *Rh. rhabdotum* is often epiphytic. One specimen he found growing 70 feet up on a tall tree in dense wet forest. It is interesting to note that *Rh. rhabdotum* is very common in the Gale Chu Valley in S. Bhutan, and from this locality is represented by Nos. 2940, 2944.

NERIIFLORUM SERIES.**NERIIFLORUM SUBSERIES.****Rh. phaedropum** Balf. f. et Farrer.

Central Bhutan, Chendebi. Alt. 7,500 feet. Flowers deep red.
12th May 1937. No. 3025.

Rh. phaedropum is easily distinguished from *Rh. neriiflorum* by its glandular ovary. Both species were found by Ludlow and Sherriff on their first expedition.

THOMSONII SERIES.**CAMPYLOCARPUM SUBSERIES.****Rh. campylocarpum** Hook. f.

Central Bhutan, Lamse La. Alt. 10-12,000 feet. Common in Rhododendron and Abies forest. 14th May 1937. No. 3048. And Phobsikha. Alt. 10,000 feet. 15th May 1937. No. 3058.

THOMSONII SUBSERIES.**Rh. Thomsonii** Hook. f.

Central Bhutan, Chendebe. Alt. 8,000 feet. 13th May 1937. No. 3042.

Rh. Thomsonii Hook. f. var. **candelabrum** Hook. f.

Central Bhutan, Phobsikha. Alt. 10,000 feet. Shrub 4 feet. Differs from No. 3042 in the flowers being pink, spotted red. Calyx much smaller and fringed with hairs, while the pedicels are glandular. There are deep magenta blotches at the base. Corolla fleshy. Filaments 10, hairy towards the base. Style glabrous. Ovary green, glabrous. Only two bushes like this seen here, where No. 3042 is very common. 16th May 1937. No. 3066.

This is a plant which was first found in pine woods near Lachen in Sikkim. It was described by Hooker as *Rh. candelabrum*, and is well figured in "The Rhododendrons of Sikkim-Himalaya," t. 29. From *Rh. Thomsonii* it may be distinguished by the flowers which are light pink, the calyx which is small and lobed, and the ovary and pedicels which are glandular. Although the Bhutan plant has no glands on the ovary, the pedicels are distinctly glandular; in other respects it agrees with Hooker's species, now regarded as a variety of *Rh. Thomsonii*.

TRIFLORUM SERIES.**TRIFLORUM SUBSERIES.****Rh. triflorum** Hook. f.

Central Bhutan, Phobsikha. Alt. 10,000 feet. 15th May 1937. No. 3061.

VIRGATUM SERIES.**Rh. virgatum** Hook. f.

Central Bhutan, Chendebe-Trongsa Road. Alt. 65-7,500 feet. 11th May 1937. No. 3021.