

A CONTRIBUTION TO THE FLORA OF SHIROY HILLS, UKHRUL, MANIPUR

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ABSTRACT

The paper deals 49 species of flowering plants belonging to 32 families which are reported as new records from Shiroy hills. Forest vegetation at the ranges of altitudes and a short description of the species, locality, date of collection, field number and altitude were described.

INTRODUCTION

Shiroy hills are situated in eastern part of Ukhrul District of Manipur and its location fall at 25°13' N latitude and 94°25' E longitude at the altitudinal ranges from 1730 m to 2590 m from sea level. The mean maximum temperature ranges from 22.8°C (February) to 30.2°C (September) and mean minimum temperature from 3.6°C (January) to 13.2°C (September). The average annual rainfall is 1617 mm. The authors collected the plant species from Shiroy hills during their frequent visits to Shiroy hills from 1987 to 1990 (Fig. 1).

VEGETATION

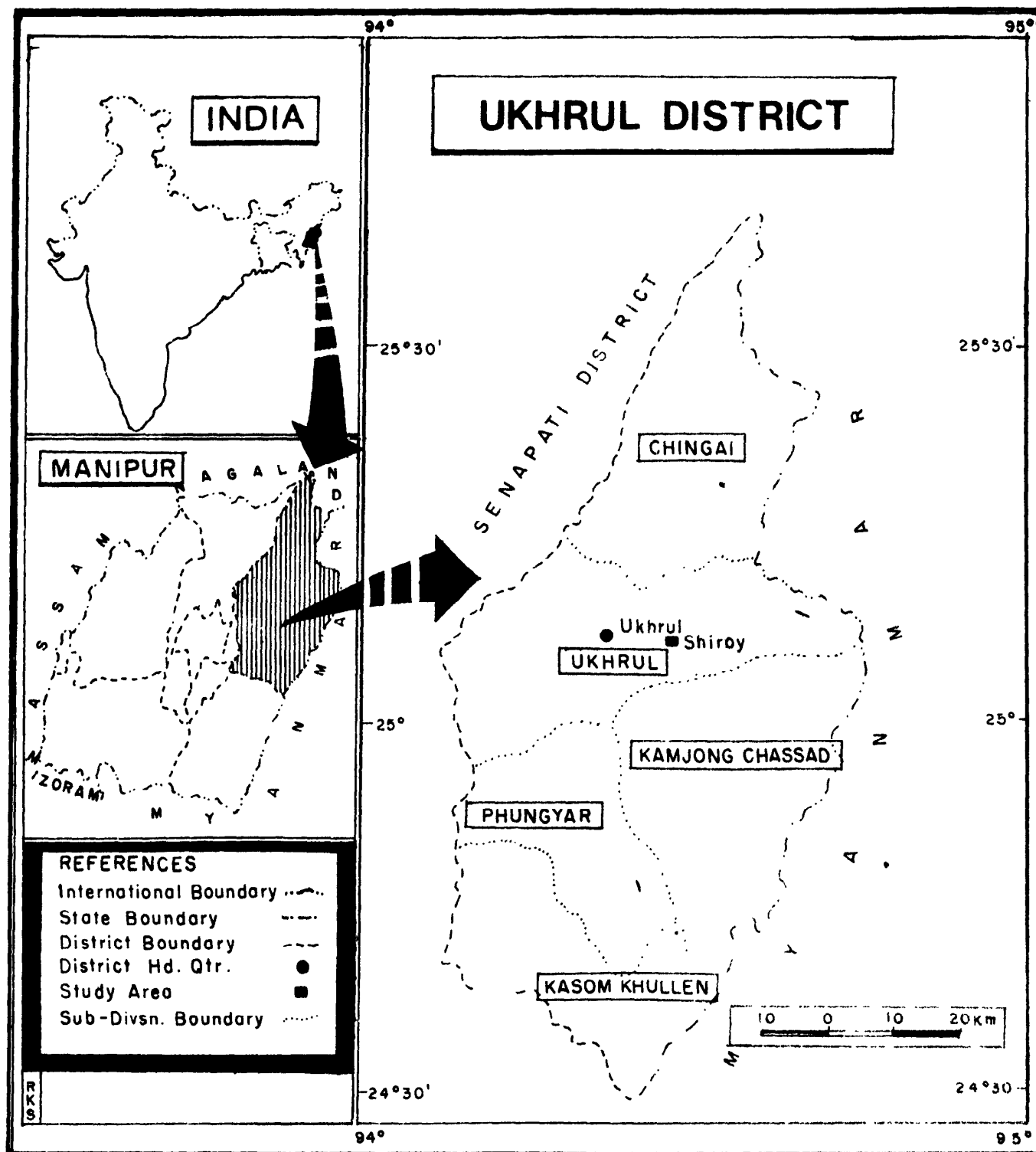
Shiroy hills fall under group "11" (Sub-Group 11 BC₁) of the Eastern Himalayan Wet Temperate Forest type (Champion and Seth 1968). The plant communities which were present between 1730 m and 2000 m altitude were : *Alnus nepalensis* D. Don, *Aralia montana* Bl., *Castanopsis tribuloides* A. DC., *Cinnamomum zeylanicum* Bray, *Engelhardtia spicata* Bl., *Gaulthera griffithiana* Wight, *Juglans regia* Linn., *Lyonia ovalifolia* (Wall.) Drude; *Neolitsae cassia* (L.) Koste; *Lindera latifolia* Hook., *Michelia dolsopa* (Buch.-Ham) DC. *M. oblonga* Wall. ex Hook. & Thoms., *Pinus kesiya* Roxb., *Pyrularia edulis* (Wall. ex Roxb.) DC., *Lithocarpus dealbata* (Miq.) Rehder, *L. fenestrata* (Roxb.) Rehder, *Quercus*

griffithii H.f. Thoms., *Q. lamellosa* Sm., *Schima wallichii* Choisy and *Styrax serrulatum* Roxb.

At higher altitude (2000 m to 2400 m) the species of *Lindera pulcherrima* (Nees) Benth. ex Hook. f., *Michilus odoratissima* Nees, *M. himalayana* Griff., *Quercus semecarpifolia* Smith and *Rhododendron arboreum* Sm., were associated with *Bambusa vulgaris* Schrad.

The three peaks of Shiroy hills at the altitudinal ranges of 2000 m to 2590 m were covered by grass species. Among the species *Anemone rivularis* Ham., *Cirsium segetum* Bunge, *Eulalia pallens* (Hack.) O. Kuntz., *Holcus lanatus* Linn., *Iris wattii* Baker were the dominant herb species associated with *Lilium macklineae* Sealy. The endemic species of Manipur growing naturally on the third peak of Shiroy hills. The same species has been reported from the Dzuko valley of Nagaland / Manipur, a disputed area. The valley itself bordering Manipur and Nagaland and as per the maps issued by the Surveyor General of India two-thirds of the valley lies in Manipur and one-third in Nagaland (Karnatak 1994). *Tragopan blithii*, the endemic bird of India also makes its habitat in the surrounding forest of this third peak. The Shiroy hill range is of highly ecological significance being a rich habitat of endemic plant and animal species.

Mukerjee (1953) has enumerated 72 species of orchids from Ukhrul. Deb (1961) reported a list of 2007 taxa of flowering plants from Manipur. Besides this Shukla and Baishya (1979) reported



Ukhrul District showing Study Site (Shiroy).

additional list of 49 genera and 53 species of flowering plants and a list of 13 Cryptogams from Manipur.

Ethnobotanical value of some plants from Ukhrul District of Manipur have been studied by Elangbam *et al.* (1989).

Therefore, the present paper deals 49 species of flowering plants from Shiroy hills which had not been reported earlier workers. In the following enumerations species are arranged alphabetically under their respective families and the families are also listed alphabetically.

Locality, altitude, date of collection, field number, local name in Tangkhul dialect has been mentioned. Specimen collected by the authors from Shiroy hills have been deposited to the Herbarium Department of Life Sciences, Manipur University, Imphal.

ENUMERATION

ACANTHACEAE

Strobilanthes multidens Clarke

Local name : "Mongchingwon".

Herb, flower yellow, leaves ovate, hairy.

Common in the hill slopes.

Shiroy hills, Ukhrul (1900 m), 25.9.1987. 13159.

ARALIACEAE

Hedera nepalensis K. Koch (= *H. helix* Linn.)

Local name : "Seithingmachu Akhomwon".

Shrub, stems dichotomously branched.

Shiroy hills, Ukhrul, 7.2.1988. 2535.

ASTARACEAE

Parthenium hysterophorus Linn.

Local name : "Khangaoazat".

Herb, flowers pinky, head small in dense terminal corymbs.

Common in open slopes of hills.

Shiroy hills, Ukhrul (1900 m), 23.2.1988. 2536.

Gynura pseudochina DC. (= *G. hispida* Thw.)

Local name : "Hokphunnewon".

Herb, flowers pale yellow, heads many terminal.

Leaves serrate, alternate.

Shiroy hills, Ukhrul, 27.10.1987. 3138.

BORAGINACEAE

Ehretia acuminata Br.

Local name : "Nangamthing".

Tree, inflorescence raceme, leaves ovate, slightly serrate.

Common in dense forest.

Shiroy hills, Ukhrul (1880 m), 11.12.1987. 3027.

CARYOPHYLLACEAE

Stellaria vestita Kuzz (= *S. saxatilis* Ham.)

Local name : "Chonglawon".

Herb, flowers small, white, leaves ovate, growing on hill slopes.

Not common.

Shiroy hills, Ukhrul (1900 m), 24.9.1987. 3123.

FEBACEAE

Crotalaria verrucosa Linn.

Climbing herb, flowers violet.

Common inside the forest.

Shiroy hills, Ukhrul (1900 m), 8.8.1987. 3160.

Desmodium microphyllum (Thunb.) DC. (= *D. parvifolium* DC.)

Local name : "Machakarhangwon".

Herb, flowers many small, red.

Common on the road sides and open slopes of hills.

Shiroy hills, Ukhrul (1900 m), 24.9.1987. 3131.

Millettia cinerea Benth.

Local name : "Thalik".

Shrub, climber, growing inside the forest.

Shiroy hills, Ukhrul (1800 m), 15.2.1988. 3180.

Pueraria peduncularis (Benth.) Grah.

Shrub climber, flowers pale yellow strong wiry stem, leaves simple hairy.

Common in dense forest.

Shiroy hills, Ukhrul (1800 m), 16.8.1987. 2621.

FAGACEAE

Quercus lamellosa Sm.

Local name : "Phalungtheithing".

Deciduous tree, leaves simple, alternate, serrate.

Common in dense forest.

Shiroy hills, Ukhrul (1900 m), 12.3.1988. 2538.

GENTIANACEAE

Swertia chirayita (Roxb. ex Fleming) Koster.

Local name : "Changla".

Perennial herb, flowers small, white, leave sub-sessile, growing in the shady slopes of forest.

The species shows its range of distribution from Kashmir to Bhutan and North Eastern India and used widely for stomach troubles.

Shiroy hills, Ukhrul (2500 m), 29.9.1987. 3133.

BALSAMINACEAE

Impatiens latiflora Hook.f. & Thoms.

Herb, flowers yellow, axillary, leaves lanceolate.

Common in shady places and open slopes of hills.

Shiroy hills, Ukhrul (1900 m), 14.7.1989. 1612.

I. racemosa DC.

Local name : "Nakupkhangatiwon".

Herb, flowers yellow, axillary.

Common on the road sides and hill slopes.

Shiroy hills, Ukhrul (1800 m), 24.9.1987. 3114.

GRAMINAE

Capillipedium assimile (Steudel) A. Camus.

Perennial grass, growing in open slopes and hilly tracts.

Shiroy hills, Ukhrul (1900 m), 11.12.1987. 3064.

Eulalia pallens (Hack.) O. Kuntze

Local name : "Lungkongsali"

Perennial grass, growing in grassland peak of hill.

Not common.

Shiroy hills, Ukhrul (2500 m), 11.12.1990. 3073.

Helictotrichon asperum (Munro) Bor

Perennial grass, growing in open slopes and hilly tracts.

A good fodder grass.

Shiroy hills, Ukhrul (1900 m), 11.12.1987. 3043.

Holcus lanatus Linn.

Perennial grass growing in the high altitude grassland of forest.

Not common.

Shiroy hills, Ukhrul (2500 m), 11.12.1987. 3044.

HAMAMELIDACEAE

Corylopsis himalayana Griff.

Local name : "Maiyaiwon".

Shrub, flowers bracteate, small, leaves opposite.

Common in the open slopes of hill.

Shiroy hills, Ukhrul (1900 m), 1.12.1987. 2539.

HYPERICACEAE

Hypericum elodeoides Chois

Herb, flowers small in cymes, leaves sessile, opposite.

Common in moist and shady places of forest.

Shiroy hills, Ukhrul (1800 m), 9.7.1989. 1905.

LABIATAE

Orthosiphon incurvus Benth.

Herb, flowers yellow, leaves opposite hairy.

Common in waste land jhoom.

Shiroy hills, Ukhrul (1900 m), 14.7.1989. 2540.

LAURACEAE

Cinnamomum zeylanicum Bray.

Tree, growing inside the forest.

Barks are used as spices and medicine.

Shiroy hills, Ukhrul (2000 m), 28.7.1990. 3101.

Lindera latifolia Hook.f.

Tree, growing in dense forest.

Shiroy hills, Ukhrul (1900 m), 16.5.1987. 2614.

L. pulcherrima (Nees) Benth. ex. Hook. f.

Tree, common in dense forest of higher elevation.

Singled fruit at the axile of leaf.

Shiroy hills, Ukhrul (2000 m), 28.7.1990. 3102.

Persea odoratissima (Nees) Kost. (= *Machilus odoratissima* Nees)

Local name : "Uningthou napakpi".

Evergreen tree, leaves simple opposite, fruits blue in colour.

Shiroy hills, Ukhrul (2300 m), 12.12.1988. 3061.

LILIACEAE

Paris hexaphylla Cham.

Local name : "Pharakhamusuiwon"

Perennial herb, leaves whorled, flowers pale green.

Common in open slopes of hills of higher elevation.

Shiroy hills, Ukhrul (2400 m), 17.8.1990. 3194.

LOGANIACEAE

Fagraea ceilanica Thunb.

Local name : "Arikhangamanthing".

Tree, growing inside the forest.

Shiroy hills, Ukhrul (2000 m), 6.2.1989. 3172.

MAGNOLIACEAE

Michelia doltsopa (Buch.-Ham.) DC. (= *M. excelsa* Bl.)

Local name : "Kashongpheilawon".

Tree, flowers pale yellow.

Not common.

Shiroy hills, Ukhrul (1900 m), 28.7.1990. 3104.

M. oblonga Wall. ex Hook. f. & Thoms.

Local name : "Shilungthing".

Tree, flowers pale yellow.

Not common.

Shiroy hills, Ukhrul (1900 m), 28.7.1987. 3104.

MYRICACEAE

Myrica farquhariana Wall. (= *M. negi* Thunb.)

Local name : "Mahaotheithing".

An evergreen tree, flowers very small axillary.

Shiroy hills, Ukhrul (1100 m), 29.10.1987. 3156.

MYRSINACEAE

Embelia ribos Burm. f.

Local name : "Sirohea shathur".

Shrub, flowers greenish yellow, small, stem warty, growing inside the forest.

Not common.

Shiroy hills, Ukhrul (1900 m), 8.2.1988. 3004.

OLACEAE

Olea dioica Roxb.

Tree, leaves opposite, ovate, fruits black.

Common in dense forest.

Shiroy hills, Ukhrul (1900 m), 25.2.1989. 2542.

SAURARACEAE

Houttuynia cordata Thunb.

Perennial herb, flowers white, leaves alternate.

Common in wasteland Jhoom and open slopes of hills.

Shiroy hills, Ukhrul (1900 m), 1.1.1988. 2547.

RANUNCULACEAE

Clematis acuminata DC.

Local name : "Khamanat".

Shrub, climber, flowers pale yellow, axillary. Leaves opposite, trifoliate and pedicelled.

Shiroy hills, Ukhrul (1900 m), 18.2.1988. 2543.

Clematis bunchananiana DC.

Herb climber, flowers pale yellow, leaves pedicelled, hairy.

Common in the forest.

Shiroy hills, Ukhrul (1900 m), 26.9.1987. 3113.

ROSACEAE

Cotoneaster rotundifolia Wall. ex. Lindle.

Shrub, leaves small obovate, fruits small red.

Common both in open slopes and in dense forest.

Shiroy hills, Ukhrul (2500 m), 11.12.1987. 3041.

Potentilla fulgens Wall. ex Hook.

Local name : "Machawon"

Perennial herb, flowers yellow, growing in open slopes of hills.

Shiroy hills, Ukhrul (1900 m), 3.3.1987. 3092.

Rubus hexagynus Roxb.

A climbing prickly shrub, flowers white, raceme.

Common in dense forest.

Shiroy hills, Ukhrul (1800 m), 14.7.1988. 1916.

R. paniculatus Smith f. **paniculatus**

A creeping shrub, flowers white, stem brown, growing in dense and hilly tracts of forests.

Shiroy hills, Ukhrul (1800 m), 8.8.1987. 2545.

RUBIACEAE

Luculia pinceana Hook.

Local name : "Tipkhawon".

Shrub, flowers pink, many, terminal, growing in open slopes of forest.

Not common.

Shiroy hills, Ukhrul (1900 m), 15.5.1990. 2620.

RUTACEAE

Evodia fraxinifolia (D. Don) Hook.f.

Tree, fruits small, green in colour, pinnate compound leaves. Raw fruits when eating cure toothach.

Shiroy hills, Ukhrul (1800 m), 1.7.1987. 3017.

SANTALACEAE

Pyrularia edulis (Wall. ex Roxb.) DC.

Local name : "Langsothing".

Tree, fruits yellow, oval shaped.

Common in dense forest.

Shiroy hills, Ukhrul (2000 m), 26.3.1988. 3010.

SCROPHULARIACEAE

Pedicularis fiftida (Buch.-Ham. ex D. Don)
Pennell. (= *P. carnosus* Wall.)

Annual herb, flowers yellow, leaves whorled.

Common in waste jhoom land.

Shiroy hills, Ukhrul (1900 m), 11.12.1990.
3099.

SMILACACEAE

Smilex perfoliata Linn. (= *S. prolifera* Wall. ex
Roxb.)

Local name : "Namlanshara".

Climber, common in dense forest.

Shiroy hills, Ukhrul, 13.8.1987. 3200.

STYRACEAE

Styrax serrulatum Roxb.

Local name : "Kamuthing".

Medium size tree, flowers small, sessile white.

Common in dense forest.

Shiroy hills, Ukhrul (1800 m), 6.6.1987. 2546.

SYMPLOCACEAE

Symplocos ramosissima Wall. ex G. Don

Small tree, flowers small, many, pale yellow
axillary.

Common in dense forest.

Shiroy hills, Ukhrul (2000 m), 1.7.1987. 3012.

VALERIANACEAE

Valeriana hardwickii Wall.

Herb, flowers whitish, head small, many.

Common in open slopes and hilly tracts.

Shiroy hills, Ukhrul (1800 m), 15.2.1988. 3176.

ZINGIBERACEAE

Hydychium coccineum Buch.-Ham. ex Smith.

Local name : "Maibiwon".

Perennial herb, spike long, flowers red.

Common in a shady places, and hillocks.

Shiroy hills, Ukhrul (2000 m), 12.8.1990. 3082.

Roscoeia alpina Royle

Perennial herb, flowers pinky, growing in
Shiroy hills, Ukhrul (2500 m), 8.8.1987. 3080.

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