

New Species of Asiatic Lepidote Rhododendrons.

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The species of *Rhododendron* enumerated below have already appeared with an English description in the recently published "Species of *Rhododendron*." They all belong to various series of the Lepidote *Rhododendrons*. They are here published with a Latin diagnosis and also with collector's notes and localities. The species dealt with are the following:—

- Rhododendron asperulum*, Hutch. et Ward, p. 182.
" *calciphilum*, Hutch. et Ward, p. 179.
" *chrysolepis*, Hutch. et Ward, p. 172.
" *ciliipes*, Hutch., p. 177.
" *concinnoides*, Hutch. et Ward, p. 180.
" *crebreflorum*, Hutch. et Ward, p. 173.
" *deleiense*, Hutch. et Ward, p. 172.
" *flavantherum*, Hutch. et Ward, p. 181.
" *fragariflorum*, Ward, p. 179.
" *imperator*, Hutch. et Ward, p. 176.
" *insculptum*, Hutch. et Ward, p. 182.
" *kasoense*, Hutch. et Ward, p. 181.
" *lysolepis*, Hutch., p. 175.
" *mishmiense*, Hutch. et Ward, p. 173.
" *notatum*, Hutch., p. 177.
" *paludosum*, Hutch. et Ward, p. 175.
" *pruniflorum*, Hutch. et Ward, p. 174.
" *riparium*, Ward, p. 180.
" *scopulorum*, Hutch., p. 178.
" *seingkuense*, Ward, p. 174.
" *Taggianum*, Hutch., p. 178.
" *taronense*, Hutch., p. 178.
" *tsangpoense*, Hutch. et Ward, p. 175.
" *uniflorum*, Hutch. et Ward, p. 176.

Boothii Series.**Rh. chrysolepis**, Hutch. et Ward, sp. nov.

The Species of *Rhododendron* (1930), 161.

Affinis *R. aureo* Franch., sed antheris haud exsertis, calycis lobis brevissimis differt.

Frutex parvus epiphyticus, ramis elongatis, cortice profunde rubro-brunneo mox deciduo; ramuli glabri vel fere glabri. Folia oblongo-lanceolata, utrinque subacuta, 6-12 cm. longa, 2-3 cm. lata, supra glabra et leviter reticulata, infra glauco-purpurea et dense papillosa, squamis aureis spatium diametro suo triplo distantibus; petioli circiter 1.3 cm. longi. Inflorescentia terminalis, circiter 5-flora; pedicelli 1.3 cm. longi, squamis aureis induti. Flores flavi, inodori. Calyx brevis et undulate lobatus, extra lepidotus sed margine glabro. Corolla 3 cm. longa, 5-loba; tubus et lobi extra squamis lineatis instructi, tubo basin versus pubescente. Stamina 10, valde inaequalia, basin versus pubescentia. Ovarium 5-loculare, squamis aureis densissime obtectum; stylus corolla longior, in parte inferiore $\frac{2}{3}$ lepidotus; stigma magnum. Capsula 1.3 cm. longa, squamis brunneis dense oblecta.

UPPER BURMA. Valley of the Seinghku Wang, 7000-8000 ft., growing on an Alder tree in the river bed, Ward 6808 (type); Ward 6769; 7455.

Rh. deleiense, Hutch. et Ward, sp. nov.

The Species of *Rhododendron* (1930), 163.

A *R. tephropeplo*, Balf. f. et Farrer, foliis majoribus, floribus 7-8 aggregatis recedit.

Frutex; ramuli squamis parvis nigris induti. Folia sparsa, oblonga, apice rotundata et mucronata, 6-13 cm. longa, 2.5-4 cm. lata, infra squamis aequalibus nigris dense induta, squamis spatium diametro suo distantibus; petioli 1.3 cm. longi. Inflorescentia terminalis, brevissime racemosa, circiter 7-8-flora; pedicelli 2.5 cm. longi, glanduloso-lepidoti. Flores atro-rosei. Calyx magnus, profunde lobatus, lobis ovato-ellipticis apice rotundatis extra leviter glanduloso-lepidotis. Corolla tubuloso-campanulata, 3 cm. longa, extra elepidota. Stamina 10, leviter exserta, in parte triente inferiore pubescentia. Ovarium 5-loculare, lepidotum; stylus staminibus paullo longior, in parte inferiore $\frac{1}{2}$ vel $\frac{2}{3}$ lepidotus. Capsula circiter 1 cm. longa, calycis lobis magnis persistentibus cincta.

ASSAM. Delei Valley, 8000-11,000 ft., Ward 8202 (type); Ward 8165.

Rh. mishmiense, Hutch. et Ward, sp. nov.

The Species of *Rhododendron* (1930), 166.

Affinis *R. Boothii*, Nutt., sed inflorescentia 3-4-flora, pedicellis villosis differt.

Frutex epiphyticus; ramuli breviter hirsuti; foliorum perulae mox deciduae. Folia elliptica vel oblongo-elliptica, acuminata, 9-11 cm. longa, 3-4.5 cm. lata, crasse coriacea, supra costa media et marginibus pubescentia, infra dense lepidota, squamis impressis vix diametro suo distantibus, nervis lateralibus pluribus distinctis; petioli hirsuti, 8 mm. longi. Inflorescentia terminalis, 3-4-flora; pedicelli 2.5 cm. longi, villosi et squamis paucis instructi; florum perulae mox deciduae, breviter albo-ciliatae. Flores limoni-flavi, corollae lobo superiore rubro-brunneo-maculato. Calyx magnus, profunde 5-lobus, 1.3 cm. longus, lobis rotundatis pilis undulatis flavis vel cinereis ciliatis extra lepidotis. Corolla late campanulata, lobis 5 patulis rotundatis, extra lepidota et molliter pubescens, circiter 3 cm. longa. Stamina 10, inferne pilosa, antheris 8 mm. longis rubro-brunneis. Ovarium 5-loculare, profunde sulcatum, dense lepidotum; stylus brevissimus et curvatus, glaber. Capsula 1.3 cm. longa, lepidota, calyce reflexo venoso persistente cincta.

ASSAM. Mishmi Hills; Delei Valley, 7000-8000 ft., Ward 8046 (type); Ward 8113; 9000 ft., Ward 8592.

Cephalanthum Series.**Rh. crebreflorum**, Hutch. et Ward, sp. nov.

The Species of *Rhododendron* (1930), 206.

Affinis *R. cephalantho*, Franch., floribus roseis, staminibus glabris differt.

Fruticulus prostratus; ramuli perulis persistentibus induti. Folia late elliptica, apice rotundata et mucronata, 1.3-2 cm. longa, 0.6-1.3 cm. lata, supra impresso-reticulata, infra squamis imbricatis brunneis densissime lepidota; petioli supra plani. Inflorescentia terminalis, usque ad 12-flora, floribus congestis pallide roseis; florum perulae sub anthesin persistentes, dense ciliatae; pedicelli brevissimi. Calyx magnus, ad basin in lobis late oblongis 3 mm. longis ciliatis dorso leviter lepidotis divisus. Corolla tubulosa, 2 cm. longa, extra glabra, ore villosa, limbo patente. Stamina 6, inclusa, glabra. Ovarium lepidotum; stylus brevissimus, obconicus, glaber. Capsula non visa.

ASSAM. Delei Valley, 13,000 ft., on rocky ledges, Ward 8337 (type).

Edgeworthii Series.**Rh. seingkuense**, Ward.

The Species of Rhododendron (1930), 234.

Species foliis bullatis, stylo glabro, calycis lobis extra lepidotis distincta.

Suffrutex epiphyticus; ramuli lanato-villosi; perulae foliorum subpersistentes, spatulatae, pilis longis marginatae. Folia ovata ad oblongo-elliptica, abrupte acuminata, basi rotundata, 4-8 cm. longa, 2-4 cm. lata, supra nervis impressis glabrescentia, infra rufo-tomentosa; petioli 8 mm. longi, tomentosi. Inflorescentia terminalis, 1-flora; pedicelli 2 cm. longi, lanati. Flores sulphurei, antheris rubro-brunneis. Calyx magnus, 8 mm. longus, lobis rotundatis pilis longis crispatis marginatis extra lepidotis. Corolla late campanulata, 2-2.5 cm. longa, tubo extra laxe lepidota sed haud pubescente. Stamina 10, exserta, inferne villosa; antherae 3 mm. longae. Ovarium 5-loculare, dense lanato-villosum; stylus brevis et curvatus, glaber. Capsula non visa.

BURMA. Seingku Wang, 6000-10,000 ft., on moss-bound trees in forest, Ward 6793 (type); Ward 6737.

Glaucum Series.**Rh. pruniflorum**, Hutch. et Ward, sp. nov.

The Species of Rhododendron (1930), 302.

Affinis *R. charitopei*, Balf. f. et Farrer, sed floribus pruno-purpureis, foliorum squamis contiguis differt.

Fruticosus usque ad 0.75 m. altus, ramulis brevibus lepidotis, cortice rubro-brunneo deciduo. Folia odorata, obovato-elliptica, apice rotundata et obtuse mucronata, basi leviter angustata, 2-3.5 cm. longa, 1-2 cm. lata, supra glabra, infra densissime lepidota, squamis contiguis vel leviter imbricatis pallidis et brunneis intermixtis; petioli 4 mm. longi, dense lepidoti. Inflorescentia terminalis, subumbellata, 3-5-flora; pedicelli 3 cm. longi, dense lepidoti. Flores pruno-purpurei vel violacei. Calyx profunde 5-lobatus, extra basin dense lepidotus, lobis ellipticis 4 mm. longis extra glabris et laxe lepidotis. Corolla late tubuloso-campanulata, 5-loba, circiter 1.3 cm. longa; tubus et lobi extra glabri. Stamina 10, in parte inferiore $\frac{2}{3}$ breviter pubescentia. Ovarium 5-loculare, dense lepidotum; stylus brevis et recurvatus, glaber. Capsula 6 mm. longa, calycis lobis persistentibus cincta.

UPPER BURMA. Seingku Wang, 11,000 ft., Ward 7045 (type); 11,000-12,000 ft., Ward 6924; Ward 7550. Valley of the Di Chu, 10,000-11,000 ft., Ward 7188.

ASSAM. Delei Valley, 11,000-13,000 ft., Ward 8257.

Rh. tsangpoense, Hutch. et Ward, sp. nov.

The Species of Rhododendron (1930), 304.

Affinis *R. prunifloro*, Hutch. et Ward, sed foliis infra laxissime lepidotis, floribus roseis differt.

Frutex parvus usque ad 0.75 m. altus; ramuli laxe lepidoti. Folia obovata, apice rotundata et conspicue mucronata, basi angustata, 2.5-4 cm. longa, 2 cm. lata, supra glabra, infra glauca et laxe lepidota, squamis spatium diametro suo duo vel triplo distantibus; petioli 6 mm. longi. Inflorescentia terminalis, 3-5-flora; pedicelli 2.5 cm. longi, leviter lepidoti. Flores plus minusve rosei. Calyx magnus, profunde 5-lobatus, extra basin lepidotus, lobis ellipticis 6 mm. longis fere glabris. Corolla late tubuloso-campanulata, 5-loba, fere 2.5 cm. longa, extra glabra. Stamina 10, fere ad apicem dense pubescentia. Ovarium 5-loculare, lepidotum; stylus crassus, geniculatus, glaber. Capsula 6 mm. longa.

TIBET. Doshong La, 12,000-13,000 ft., alpine slopes in exposed or sheltered situations, Ward 5844 (type); Ward 5843.

Lapponicum Series.**Rh. lysolepis**, Hutch., sp. nov.

The Species of Rhododendron (1930), 412.

Affinis *R. orthoclado*, Franch., sed foliorum squamis haud contiguus differt.

Fruticulus ramulis erectis crebre lepidotis. Folia patula vel leviter recurvata, sparsa, oblongo-elliptica, utrinque rotundata, mucronata, 1.3-2 cm. longa, 4-5 mm. lata, supra prominente glanduloso-lepidota, squamis spatium diametro suo distantibus, infra squamis vix elevatis laxe dispositis; petioli 1.25 mm. longi. Inflorescentia 3-flora, terminalis, congesta. Flores profunde violacei vel roseo-violacei, fere 2.5 cm. diametro; pedicelli brevissimi, circiter 1.25 mm. longi, laxe lepidoti, rubro tincti. Calyx inaequaliter 5-loba, lobo superiore (adaxiale) majore oblongo extra glabro margine squamis et pilis debilibus instructo. Corolla tubo breve et limbo angulo recto patente, extra elepidota; lobi 5, ovato-oblongi. Stamina 10, longe exserta, leviter inaequalia; filamenta supra basin dense villosa, violacea. Ovarium 5-loculare, squamis cinereis leviter imbricatis indutum; stylus staminibus brevior, rubro-brunneus, glaber. Capsula non visa.

Described from plants cultivated at Kew.

Rh. paludosum, Hutch. et Ward, sp. nov.

The Species of Rhododendron (1930), 418.

Affinis *R. alpicolae*, Rehd. et Wils., sed calyce bene evoluto profunde lobato staminibus 8 differt.

Fruticulus ramulis intricatis squamis nigris indutis; foliorum

perulae mox deciduae. Folia elliptica, apice obtusa et rotundata, 8 mm. longa, supra squamis profunde impressis crebre induta, infra squamis contiguis brunneis et nigris dense lepidota; petioli 2.5 cm. longi. Inflorescentia terminalis, 1-flora; pedicelli brevissimi (flores fere subsessiles); florum perulae mox deciduae. Flores violacei. Calyx magnus, lobis ovato-oblongis extra laxe lepidotis eciliatis. Corolla breviter et aperte tubulosa, extra elepidota, circiter 8 mm. longa, intra tubum parce pilosa. Stamina 8, longe exserta, basin versus pilosa. Ovarium 5-loculare, lepidotum; stylus staminibus leviter longior, basin versus minute pubescens. Capsula non visa.

SOUTHERN TIBET. Rong-chu (Tumbatse), in masses in open bogs, 12,000 ft., Ward 5792 (type). Temo La, above the Rong-chu, Ward 5778.

Lepidotum Series.

Rh. imperator, Hutch. et Ward, sp. nov.

The Species of Rhododendron (1930), 440.

Affinis *R. pumilo*, Hook. f., sed foliis oblanceolatis, floribus purpureis, stylo corolla longiore differt.

Fruticulus parvus; ramuli parce lepidoti; foliorum perulae mox deciduae. Folia oblanceolata, apice acuta ad rotundata et mucronata, 1.3-2.5 cm. longa, 6-8 mm. lata, supra glabra, infra glauco-viridia, squamis paucis parvis nigris instructa; petioli brevissimi. Inflorescentia terminalis, 1-flora; florum perulae deciduae; pedicelli carminei, fere 2.5 cm. longi, parce lepidoti. Flores purpurei, emaculati. Calyx breviter lobatus, extra lepidotus. Corolla anguste infundibularis, fere 3 cm. longa, extra ubique leviter pubescens. Stamina 10, inclusa, corolla dimidio breviora, supra basin pubescentia. Ovarium lepidotum; stylus corolla leviter longior, glaber, carmineus. Capsula 1.3 cm. longa, squamis parvis induta.

UPPER BURMA. Seinghku Wang, 10,000-11,000 ft., on bare ledges of granite cliffs, fully exposed, Ward 6884 (type).

Rh. uniflorum, Hutch. et Ward, sp. nov.

The Species of Rhododendron (1930), 446.

A *R. pumilo*, Hook. f., foliis oblongo-obovatis, floribus purpureis, stylo staminibus longiore differt.

Fruticulus parvus ramis subprocumbentibus; ramuli juniores leviter lepidoti; foliorum perulae mox deciduae. Folia congesta, oblongo-obovata, apice rotundata et mucronata, 1.3-2 cm. longa, 0.6-1.2 cm. lata, infra glauca, squamis laxissimis instructa; petioli brevissimi. Inflorescentia terminalis, 1-flora; florum perulae mox deciduae; pedicelli circiter 1.3 cm. longi, squamis parvis induti. Flores purpurei. Calyx parvus, lobis rotundatis extra lepidotis. Corolla late infundibuliformis, circiter 2.5 cm. longa, breviter lobata,

extra molliter pubescens et parce lepidota. Stamina 10, inclusa, supra basin breviter pubescentia. Ovarium lepidotum; stylus glaber, staminibus leviter longior. Capsula 6 mm. longa, lepidota.

SOUTHERN TIBET. Doshong La, 11,000–12,000 ft., on steep grassy slopes, Ward 5876 (type).

Maddenii Series.

Rh. ciliipes, Hutch., sp. nov.

The Species of *Rhododendron* (1930), 457.

Foliis nervis infra distinctis, calyce bene evoluto profunde lobato, lobo posteriore magno distincta.

Frutex; ramuli juniores setosi. Folia oblongo-lanceolata, subabrupte sed acutissime acuminata, ad basin subacutum rotundata, 5–6 cm. longa, 2–2.5 cm. lata, juniora pilis setosis ciliata demum glabra, infra squamis apreis laxè instructa; nervi laterales utrinsecus circiter 6, infra distincti; petioli 8 mm. longi, setis marginati. Inflorescentia 1-flora; pedicelli 6 mm. longi, lepidoti. Flores albi, intra basin maculo viride vel flavido ornati, odorati. Calyx bene evolutus, lobo posteriore 6 mm. longo basin versus extra lepidoto marginibus plus minusve setosis. Corolla 6 cm. longa, 5-loba; tubus extra ubique lepidotus, basin versus pubescens. Stamina 10, corolla breviora, inferne pubescentia. Ovarium dense lepidotum; stylus inferne lepidotus. Capsula non visa.

YUNNAN. Shweli-Salween Divide, 10,000 ft., on cliffs and humus-covered boulders in side valleys, Forrest 26384 (type); Forrest 25484.

Rh. notatum, Hutch., sp. nov.

The Species of *Rhododendron* (1930), 469.

Affinis *R. taronensi*, Hutch., sed foliis abrupte et breviter acuminatis, corolla longiore alba lineis purpureo-roseis notata.

Frutex parvus epiphyticus; ramuli juniores laxè lepidoti. Folia obovata vel obovato-elliptica, abrupte et breviter acuminata, ad basin angustata, 5–10 cm. longa, 2.5–4.5 cm. lata, utrinque laxè lepidota, squamis brunneis spatium diametro suo circiter triplo distantibus; petioli 8–12 mm. longi. Inflorescentia circiter 3-flora, terminalis, umbellata; pedicelli 1.3 cm. longi, laxè lepidoti. Flores albi, corollae angulis purpureo-roseis, leviter odorati. Calyx subannularis, extra lepidotus. Corolla 5 cm. longa, late infundibuliformis; tubus extra laxissime lepidotus et leviter pubescens; lobi 5. Stamina 10, corollae tubo paullo longiora, inferne pubescentia. Ovarium 5-loculare, dense lepidotum; stylus in parte inferiore triente lepidotus, corolla aequilongus. Capsula recta, 2 cm. longa, valvis ecarinatis.

UPPER BURMA. Seinghku Wang, 5000–5500 ft., abundant on trees and rocks in the river bed, Ward 6711 (type); Ward 7630. Nam Tamai, 3500 ft., Ward 6676.

Rh. scopulorum, Hutch., sp. nov.

The Species of *Rhododendron* (1930), 475.

Foliis subverticillatis sicco glauco-viridibus infra laxe et minute lepidotis, corolla extra ubique pubescente distincta.

Frutex 2-3 m. altus et diametro. Folia congesta et subverticillata, obovato-oblanccolata, apice mucronata et rotundata, basi subacuta, 5-7 cm. longa, 2-3 cm. lata, crasse coriacea, sicco pallide glauco-viridia, supra laevia et elepidota, infra laxissime et minute lepidota; petioli 1.3 cm. longi, juniores ciliati, mox glabri. Inflorescentia 3-flora; pedicelli 6 mm. longi, laxe lepidoti. Flores probabiliter rosei. Calyx profunde 5-lobus, lobis ovatis 2 mm. longis leviter lepidotis eciliatis. Corolla 4.5 cm. longa, extra squamis parvis laxe instructa et ubique graciliter pubescens. Stamina 10, in parte inferiore triente molliter et dense pubescentia. Ovarium 6-loculare, lepidotum; stylus glaber. Capsula 6-locularis, recta, 2 cm. longa, crassa, lepidota, axe stylo 6 mm. longo persistente terminato.

EASTERN TIBET. Tsangpo Gorge, 6000 ft., on boulder screes fully exposed to the sun, and in thickets on steep rocky slopes, Ward 6354 (type); Ward 6325.

Rh. taronense, Hutch., sp. nov.

The Species of *Rhododendron* (1930), 480.

Foliis sensim acuminate laxissime lepidotis, corollae-tubo brevissime distincta.

Frutex epiphyticus 3-5 m. altus; ramuli vetustiores cortice laeve tenui brunneo mox deciduo obtecti, juniores leviter lepidoti. Folia anguste elliptica ad elliptico-lanceolata, utrinque acuta, abrupte mucronata, 10-14 cm. longa, 4-5.5 cm. lata, supra elepidota, infra laxe lepidota, squamis parvis spatium diametro suo 3-5 majus distantibus; nervi laterales utrinsecus circiter 10, graciles et indistincti. Inflorescentia 5-flora, umbellata; pedicelli 1.3 cm. longi, dense lepidoti. Flores albi, prope basin maculo flavo magno ornati, fragrantis, leviter carnosii. Calyx annularis, extra lepidotus. Corolla 5 cm. longa; tubus extra laxe lepidotus; lobi 5. Stamina 10, corolla fere aequilonga, inferne pubescentia. Ovarium 6-loculare, dense lepidotum; stylus in parte inferiore $\frac{1}{4}$ lepidotus, corolla longior. Capsula basi obliqua, 3 cm. longa, 6-locularis, valvis crebre rugoso-lepidotis ecarinatis.

YUNNAN. Taron Valley, 4000-5000 ft., Ward 5501 (type).

Rh. Taggianum, Hutch., sp. nov.

The Species of *Rhododendron* (1930), 499.

Affinis *R. Nuttallii*, Booth, sed foliis anguste oblongis, nervis lateralibus infra tenuibus, corolla brevior differt.

Frutex; ramuli dense glanduloso-lepidoti. Folia aequaliter dispersa, oblongo-lanceolata, ad apicem mucronatum obtusum rotundata, basi rotundata, 6-12 cm. longa, 2.5-6 cm. lata, supra costa media lepidota, infra squamis carnosius parvis spatium diametro suo duo vel triplo distantibus instructa; nervi laterales utrinsecus circiter 14, infra distincti; petioli 1.3 cm. longi, supra haud sulcati. Inflorescentia 3-flora, umbellata; pedicelli 2 cm. longi, dense lepidoti. Flores albi, intra basin maculo flavo ornati, leviter carnosius, fragrantissimi. Calyx magnus, lobis late elliptico-ovatis foliaceis 2 cm. longis extra basin et marginibus lepidotis. Corolla 9 cm. longa, tubi basi extra dense lepidota, ceterum glabra; tubus latissimus, lobis 5 latis. Stamina 10, corollae-tubo aequilonga, inferne pubescentia; antherae 6 mm. longae. Ovarium 5-loculare, dense lepidotum; stylus staminibus aequilongus, in parte inferiore triente lepidotus. Capsula recta, 5 cm. longa, glandulis carnosius parvis induta, valvis carinatis; semina late alata.

NORTH-EAST UPPER BURMA. Western flank of the N'Maikha-Salween Divide, near Pau-ti-Lo, 10,000-11,000 ft., on margins of open conifer forests and amongst scrub on rocky slopes, Forrest 26440 (type); Forrest 27638. Base Camp, Seinghku Wang, 7000-8000 ft., Ward 6809.

Saluenense Series.

Rh. calciphilum, Hutch. et Ward, sp. nov.

The Species of Rhododendron (1930), 589.

Affinis *R. ripario*, Ward, foliis minoribus, calyce minute ciliato differt.

Fruticulus prostratus; ramuli squamis brunneis tenuibus induti; foliorum perulae mox deciduae. Folia elliptica, utrinque rotundata, leviter mucronata, circiter 8 mm. longa et 6 mm. lata, supra laxa lepidota, infra squamis imbricatis uniformibus brunneis dense induta; petioli dense lepidoti. Inflorescentia terminalis, 1-2-flora; florum perulae mox deciduae; pedicelli 1.3 cm. longi, squamis parvis induti. Flores roseo-purpurei. Calyx bene evolutus, 4 mm. longus, lobis late ellipticis extra dense lepidotis et pilis brevibus marginatis. Corolla tubo breve, circiter 1.3-2 cm. longa, extra molliter pubescens, lobis dorso squamis paucis notatis. Stamina 10, exserta, basin versus villosa. Ovarium lepidotum; stylus staminibus longior, glaber. Capsula 4 mm. longa, dense lepidota, e calyce exserta.

UPPER BURMA. Seinghku Wang, 11,000-14,000 ft., on limestone, Ward 6984 (type); 6959; 7069; 7523.

Rh. fragariflorum, Ward.

The Species of Rhododendron (1930), 594.

Species ramulis et pedicellis molliter pubescentibus et lepidotis, foliis infra laxissime lepidotis distincta.

Fruticulus lignosus vix supra 15 cm. altus; ramuli molliter et breviter pubescentes squamis paucis ornati; perulæ foliorum mox deciduæ. Folia aromatica, elliptico-obovata, apice rotundata et leviter mucronata, 2 cm. longa, 1 cm. lata, supra squamis magnis aureis laxè induta, infra laxissime lepidota, squamis aurantiacis; petioli leviter lepidoti. Inflorescentia terminalis, 3-4-flora; perulæ mox deciduæ; pedicelli 8 mm. longi, laxè lepidoti et minute pubescentes. Flores rubri, leviter fragrantès. Calyx bene evolutus, 4 mm. longus, lobis ellipticis extra et margine lepidotis. Corolla late et brevissime tubulosa, circiter 2 cm. longa, extra glabra. Stamina 10, exserta, supra basin dense pubescentia. Ovarium lepidotum; stylus longè exsertus, glaber. Capsula 6 mm. longa, laxè lepidota.

SOUTHERN TIBET. Temo La, 15,000 ft., and Nyima La, 14,000-15,000 ft., Ward 5810 (type); Ward 5734.

Rh. riparium, Ward (*R. rivulare* Ward, non Hand.-Mazz.).

The Species of Rhododendron (1930), 598.

Affinis *R. calostroto* Balf. f. & Ward, sed calycis lobis minute ciliatis, pedicellis brevioribus differt.

Suffrutex usque ad 0.5 m. altus; ramuli squamis stipitatis siccis dense induti. Folia elliptica vel oblongo-elliptica, utrinque rotundata, apice mucro parvo reflexo instructa, circiter 2 cm. longa et 1.3 cm. lata, supra tenuiter lepidota, infra squamis aequalibus pallide brunnèis densissime oblecta; pedicelli dense lepidoti. Inflorescentia terminalis, 2-4-flora; perulæ subpersistentes; pedicelli 1.3 cm. longi, laxè lepidoti. Flores purpurei, lobo superiore maculis atro-purpureis notato. Calyx bene evolutus, 6 mm. longus, lobis rubris ovato-ellipticis graciliter ciliatis extra squamis parvis numerosis plerumque indutis marginem versus glabris. Corolla circiter 2.5 cm. longa, extra tenuiter et molliter pubescens, lobis extra squamis numerosis instructis. Stamina 10, longè exserta, basin versus villosa. Ovarium dense lepidotum; stylus ruber, staminibus longior, glaber. Capsula 8 mm. longa, dense lepidota, calycis lobis persistentibus paullo longior.

SOUTHERN TIBET. Doshong La, 10,000-11,000 ft., Ward 5828 (type); 6224; North of Tsangpo, 12,000-13,000 ft., Ward 6087.

NORTH BURMA. Seinghku Wang, 11,000-12,000 ft., Ward 6903; 7061; 7062; 7553.

ASSAM. Mishmi Hills, 11,000-12,000 ft., Ward 8229.

Triflorum Series.

Rh. concinnoides, Hutch. et Ward, sp. nov.

The Species of Rhododendron (1930), 780.

Affinis *R. concinno*, Hemsl., sed corolla oblongo-tubulosa basin versus albidà, calyce plerumque ciliato differt.

Frutex parvus ; ramuli subdense lepidoti. Folia conferta, obovato-elliptica, triangulari-acuminata, obtuse mucronata, basi late cuneata, 2.5-4.5 cm. longa, 1-3-2.5 cm. lata, infra squamis brunneis dense induta, squamis spatium diametro suo dimidio distantibus ; petioli 4 mm. longi, dense lepidoti. Inflorescentia terminalis, 3-flora ; florum perulae mox deciduae ; pedicelli 8 mm. longi, dense lepidoti. Calyx parvus, lobis parvis rotundatis lepidotis interdum ciliatis. Corolla late tubuloso-campanulata, circiter 2.5 cm. longa, extra dense lepidota, tubo basin versus albido, lobis roseo-purpureis intra maculatis. Stamina 10, longiora leviter exserta, basin versus pilosa. Ovarium 5-loculare, lepidotum ; stylus glaber, gracilis, staminibus multo longior. Capsula 2 cm. longa, dense lepidota.

ASSAM. Delei Valley, 8000-11,000 ft., Ward 8578 (type) ; 8168 ; 8227.

Rh. flavantherum, Hutch. et Ward, sp. nov.

The Species of *Rhododendron* (1930), 786.

Folii oblongo-ellipticis infra cinereo-glaucis floribus umbellatis flavis distincta.

Frutex 2-3.3 m. altus ; ramuli parce lepidoti. Folia oblongo-elliptica, apice subtriangularia et obtuse mucronata, basi rotundata, 3-4.5 cm. longa, 1.3-2 cm. lata, infra glauca et squamis inaequalibus spatium diametro suo duplo vel triplo distantibus ; petioli 8 mm. longi, squamis impressis paucis notati. Inflorescentia terminalis, 3-flora ; pedicelli 8 mm. longi, dense lepidoti ; florum perulae mox deciduae. Flores flavi, antheris aurantiacis. Calyx magnus, profunde lobatus, lobis late rotundatis 4 mm. longis extra laxe lepidotis. Corolla late tubulosa, 2 cm. longa, extra ubique laxe lepidota. Stamina 10, exserta, inferne pilosa. Ovarium 5-loculare, lepidotum ; stylus staminibus longior, in parte inferiore dimidio lepidotus. Capsula 1.3 cm. longa, dense glanduloso-lepidota.

SOUTHERN TIBET. Tsangpo Gorge, near Curung Confluence, 8000-9000 ft., on vertical cliffs, in light shade, Ward 6313 (type).

Rh. kasoense, Hutch. et Ward, sp. nov.

The Species of *Rhododendron* (1930), 787.

Affinis *R. lutescenti*, Franch., sed corollae tubo superne lepidoto sed haud pubescente differt.

Frutex divaricatus vel compactus ; ramuli parce lepidoti. Folia oblongo-lanceolata, acute acuminata, 4-6 cm. longa, 1.3-2 cm. lata, utrinque parce lepidota, squamis infra spatium diametro suo duplo vel triplo distantibus ; petioli 6-8 mm. longi, laxe lepidoti. Inflorescentia terminalis, 3-flora ; pedicelli circiter 4 mm. longi, dense lepidoti ; florum perulae mox deciduae. Flores flavi, antheris rubris. Calyx parvus et subannularis, extra lepidotus. Corolla tubuloso-

campanulata, 2 cm. longa, extra ubique laxe lepidota. Stamina 10, inaequalia, exserta, parte inferiore dimidio vel triente dense villosa. Ovarium 5-loculare, glanduloso-lepidotum; stylus staminibus longior, glaber. Capsula 2 cm. longa, fere recta, glandulis aureo-brunneis dense induta.

ASSAM. Delei Valley; Kaso Peak, 7000–8000 ft., Ward 8522 (type); 8700.

Vaccinioides Series.

Rh. asperulum, Hutch. et Ward, sp. nov.

The Species of *Rhododendron* (1930), 818.

Affinis *R. vaccinioides*, Hook f., sed foliis multo majoribus nervis lateralibus distinctis supra impressis differt.

Frutex parvus plerumque epiphyticus; rami annotini et hornotini rugoso-scabridi, rubescentes. Folia obovato-oblancoolata, emarginata et mucronata, 2.5–4 cm. longa, 1.3–2 cm. lata, coriacea, infra laxe glanduloso-punctata, glandulis spatium diametro suo duplo vel triplo distantibus, nervis lateralibus supra impressis distinctis. Inflorescentia 3-flora, terminalis; pedicelli circiter 1.3 cm. longi, leviter rugosi. Flores pallide rosei, antheris aurantiacis. Calyx profunde lobatus, lobis oblongis 4 mm. longis extra laxe lepidotis. Corolla breviter campanulata, 8 mm. longa, 5-loba, extra leviter lepidota. Stamina 10, exserta, in parte triente media pubescentia. Ovarium ovoideum, lepidotum, in stylum crassum glabrum sensim angustatum. Capsula 2.5 cm. longa, ab apice dehiscens; semina minuta, utrinque filiformi-caudata.

UPPER BURMA. Seinghku Wang, on alders and other trees and boulders in open pastures, Ward 6801 (type); valley of the Di Chu, 7000 ft., Ward 7163.

Rh. insculptum, Hutch. et Ward, sp. nov.

The Species of *Rhododendron* (1930), 821.

Peraffinis *R. emarginato*, Hemsl. et E. H. Wils., sed ovario lepidoto et pubescente floribus aurantiacis differt.

Frutex parvus epiphyticus; ramuli juniores rugoso-lepidoti; foliorum perulae mox deciduae. Folia verticillata, late obovato-spatulata, apice emarginata et mucronata, ad basin sensim angustata, circiter 4 cm. longa, coriacea, nervis supra multo impressis, infra laxe punctato-lepidota. Inflorescentia axillaris, 1-flora; pedicelli 2.5 cm. longi, angulares, basi squamis persistentibus confertis. Flores aurantiaci, antheris rubro-brunneis, stylo aurantiaco. Calyx parvus, breviter undulate 5-lobus, extra lepidotus. Corolla late campanulata, carnosa, 1.3 cm. longa, 5-loba, extra parce lepidota, intra tubi apicem pubescens. Stamina 10, exserta, inaequalia, usque ad ultra medium

pubescentia. Ovarium 5-loculare, oblongo-ellipsoideum, dense lepidotum et molliter pubescens; stylus ovario aequilongus, crassus, glaber, ad apicem sensim expansus et abrupte geniculatus. Capsula circiter 2.5 cm. longa, ab apice dehiscens, valvis tenuibus squamis parvis parce indutis.

UPPER BURMA. Seinghku Wang, temperate rain-forest at 6000-7000 ft., Ward 6735 (type).