Some Interesting and Undescribed Vacciniaceae from Burma and Western China.

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With Plates CCXIX–CCXXI and One Figure in the Text.

The following pages contain an account of four apparently undescribed species of the genus *Agapetes*, and also of a distinct variety of the peculiar *Pentapterygium interdictum*, the typical form of which was discovered in 1916 by Dr. Handel-Mazzetti in Yunnan and has been recently described by him.*

To this there have been added certain facts respecting the distribution and structure of several other rare and previously little known *Vacciniaceae*, which it would appear advisable to put on record and which, it should be stated, are the outcome almost entirely of the labours of Messrs. George Forrest, F. Kingdon Ward, and R. Farrer in Upper Burma and W. China during recent years.

Agapetes burmanica, W. E. Evans, sp. nov. Plate CCXIX.

Inter species foliis magnis et staminibus dorso calcaratis munitas haec *A. grandiflorae*, Hook. f. solum appropinquat; foliis saepius majoribus, ovario conspicue majore, calycis dentibus multo majoribus ab illa facile distinguenda.

Frutex glaberrimus sempervirens ex collectore epiphyticus circ. 1.5–2 m. altus. Rami hornotini lēves circ. 4 mm. diametro brunnei, parte inferiore squamis (foliis valde reductis) rubro-brunneis anguste triangularibus ad 1 cm. longis 3 mm. latis plus minusve distanter sparsis exceptis nudi, superne foliis virescentibus praediti; vetustiores ad 1 cm. diametro cortice brunneo-griseo. Folia persistentia oblongo-lanceolata maxima ad 24 cm. longa 6 cm. lata sessilia coriacea, basi rotundata vel paulo cordato-auriculata, in apicem angustatum brevem acutiusculum plus minusve attenuata, margine leviter et distanter sinuoso-denticulata, paginis duabus glabra virescentia, venis venulisque prominentibus, vena marginali distincta. Racemi glabri breves coarctati pluriflori e ramis vetustioribus orientes, bracteis parvis

* Anzeig. Akad. Wiss. Wien, Sonderabd. No. 27 (13th Dec. 1923), p. 7.

angusti-lanceolatis acutissimis 1–2 mm. longis; pedunculi circ. 2.5 cm. longi superne in apicem 3 mm. latum cum ovario articulatum sensim ampliati. Flores maximi; calyx circ. 1.5 cm. longus ad tertiam partem in lobos angusti-triangulares acutos basi 4 mm. latos fissus; corollae 6 cm. longae glaberrimae tubus cylindricus 7 mm. latus ore vix constrictus ex collectore saturate roseus venis purpureis reticulatus, lobi anguste triangulares circ. 1 cm. longi basi 4 mm. lati acutiusculi mox patentes pallide virides; stamina 5.6 cm. longa a corollae tubo libera, filamentis circ. 1.3 cm. longis in anulum basalem 5 mm. altum glabrum coalitis superne albo-pilosis inter se liberis, antheris pilosulis superne in cornua valde elongata sterilia sub apice porosa dorso calcaribus robustis 1.5–2 mm. longis praedita inter se coalita attenuatis; ovarium inferum cum calicis tubo circ. 6 mm. latum, stylo glabro gracili ad 6 cm. alto, stigmate apicali parvo globoso. Fructus maturus magnus, calycis persistentis segmentis chartaceis circ. 12 mm. longis basi 5–6 mm. latis exceptis 8–10 mm. latus et longus.

N.E. UPPER BURMA. "On forest-trees and ledges of cliffs, hills around Htawgaw. Lat. 26° 10′ N. Long. 98° 25′ E. Alt. 7,000 ft. Epiphytic shrub of 5–6 ft. Foliage coriaceous, not succulent. Flowers slightly fleshy, deep rose-magenta, barred and netted black-purple, tipped pale green, anthers orange." In flower, September 1924. G. Forrest 24981. Type! In mature fruit, November 1925. G. Forrest 27719!

This showy species is clearly closely allied to *Agapetes grandiflora*, Hook. f., which it greatly resembles in the size and structure of its flowers. The foliage, in the material seen, is larger and if anything more pronouncedly sessile than in that species; while the prominent reticulate venation rather recalls that of the otherwise very different *A. auriculata*, Hook. f., from which the absence of a calyciform expansion at the apex of the pedicel in the present plant at once distinguishes it.

The most striking characteristic of *A. burmanica* lies in its very large fruit and calyx-lobes. This peculiarity suggests a close affinity with the imperfectly known *A. megacarpa*, W. W. Sm., described from fruiting specimens collected on the Shweli-Salween divide, Yunnan. Unfortunately, the structure of the corolla and stamens in that species being quite unknown, it is impossible to be certain of this, but it may be stated that the differences observable in the foliage and calyx of the two forms seem to make it certain that they are not conspecific. The leaves in *A. megacarpa* differ from those of *A. burmanica* in being smaller, in their almost entire margin and in having a finer, much less prominent venation, the marginal vein of which is both more obscure and situated distinctly closer to the leaf-edge; while its calyx-lobes are smaller being, in the fruiting state, only about half as wide as those of the latter species.

Agapetes Brandisiana, W. E. Evans, sp. nov. Text fig. 1, C.

Species haec calycis tubo supra medium anulum valde prominentem gerente insignis; a cl. Brandisio,* speciminibus florentibus visis, inter species pedicellis sub calyce magis dilatatis notatas cum *A. auriculato*, Hook. f. dubie posita.

Frutex glaberrimus, ex Brandisio rupicola. Rami hornotini robusti ad 5 mm. diametro angulosi pallide brunnei. Folia subpetiolata; lamina elliptica acuta integerrima ad 12 cm. longa 3.6 cm. lata coriacea margine leviter recurvata paginis duabus virescens vena primaria venulisque gracilibus plus minusve distinctis, apice in apiculum brevem saepius attenuata, basi in petiolum brevissimum angustata vel paulo rotundata. Racemi breves pluriflori e ramis vetustioribus orientes, pedicellis post anthesin 2.6 cm. longis apice valde expansis cum calycis tubo articulatis; calycis (post anthesin) dentes triangulares apice paulo attenuati circ. 3 mm. longi basi circ. 2.6 mm. lati, tubus circ. 5 mm. altus 6 mm. latus supra medium anulo horizontali valde prominente cinctus; corollae delapsae sed (teste Brandisio) e basi supra ampliatae.

UPPER BURMA. Sinlum, Bhamo Division, alt. 5,750 ft. Young fruit, May 1909. G. E. S. Cubitt 351 in Herb. Lace (ex Herb. Calcut.). Type! Distributed as *Agapetes macrantha*, Hook. f.

Hills east of Bhamo, alt. 6,500 ft. A shrub growing on granite boulders. Montagu Hill, teste Brandis.*

Though attempts have been made to do so, it is unfortunately now impossible to trace the specimens collected by Montagu Hill and forwarded by him to Sir D. Brandis. The above description of the species has therefore had to be based upon an example in early fruiting condition collected by G. E. S. Cubitt and distributed from the Calcutta Herbarium.

There seems to be no room for doubt that the two gatherings cited are conspecific. The peculiarly ringed calyx-tube is apparently unique in the genus while, in addition, both were obtained in the same area. It should be made clear, however, that no flowering specimens have been seen by the present writer and that those mentioned by Brandis are only associated with the type of *A. Brandisiana* on circumstantial evidence.

Brandis describes the flowers in the specimens seen by him as follows:—"Corolla widening upwards, calyx supported by a double epicalyx, the outer spreading, the inner adnate to the calyx-tube, with a free margin."* The so-called double epicalyx is, however, hardly comparable to such a structure, at any rate in its origin. It consists of two altogether distinct parts (text fig. 1, C); the lower being the much expanded apex of the pedicel, actually forming a shallow cup, within which is articulated the narrow base of the calyx.

* Indian Trees, Imp. 4 (1921), p. 405.

The upper part consists of a marked, projecting ring of tissue, situated above the middle of the tube of the calyx and, as seen in longitudinal

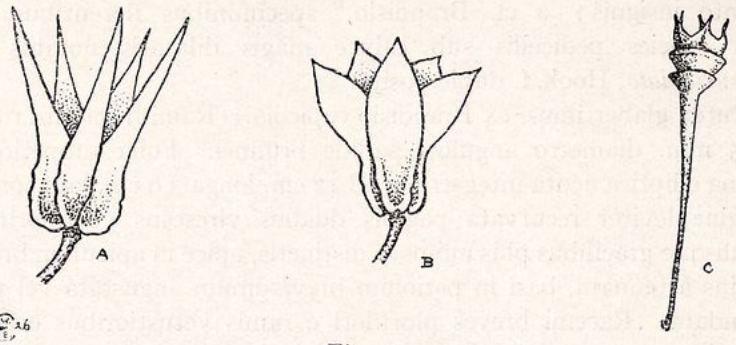

Fig. 1.

A. Advanced fruiting calyx of *Pentapterygium interdictum*, Hand.-Mzt. var. *stenolobum*, W. E. Ev. Very slightly enlarged.

B. Less advanced fruiting calyx of the typical form of *Pentapterygium interdictum*, Hand.-Mzt., taken from a cotype in Herb. Edin. Very slightly enlarged.

C. Fruiting pedicel and calyx of *Agapetes Brandisiana*, W. E. Ev., taken from the type in Herb. Edin. Natural size.

section, arising from it directly at that level. It does not form a cup-like structure although, owing to the sudden narrowing of the calyx above it, the impression that it does so is apt to be created.

Agapetes Forrestii, W. E. Evans, sp. nov. Plate CCXX.

Species distinctissima, inflorescentiis axillaribus corymboso-racemosis atque foliis parvis ovato-lanceolatis apicem versus prolongatis et angustatis inter omnes descriptas insignis.

Frutex epiphyticus circ. 1 m. altus. Rami hornotini graciles 1–1.5 mm. diametro dense setoso-hirtelli setis simplicibus vel furcatis basi bulbosis. Folia numerosa sparsa glaberrima carnosula ; lamina ovato-lanceolata apicem versus angusti-prolongata 3–4 cm. longa 8–12 mm. lata acutissima in petiolum circ. 2 mm. longum attenuata, margine plus minusve recurvata inconspicue et distanter glanduloso-dentata, supra viridis in sicco valde reticulata subtus pallidior atque lēvior venis obscuris. Racemi axillares subcorymbosi glaberrimi parte inferiore circ. 2 cm. longa bracteis paucis minutis caducis angusti-triangularibus haud 1 mm. attingentibus exceptis nudi, superne 4–6-flori ; pedicelli rubidi circ. 1.3 cm. longi in apicem crassum sub ovario articulatum gradatim expansi. Flores mediocres ad 2 cm. vel vix ultra attingentes ; dentes calycini late triangulares acuti circ. 1.5 mm. longi basi 1 mm. lati ; corollae cylindricae apice leviter contractae tubus 6–8 mm. latus ruber venis undulatis saturatis pictus, lobi late triangulares circ. 2 mm. alti et lati acuti virescentes ; stamina circ. 1.5 cm. longa filamentis plus minusve pilosis 1 mm. longis a corolla et inter se liberis, antheris haud calcaratis parte inferiore pilosulis gibbosis superne in cornua inter se adhaerentia elongatis ;

ovarium (cum calycis tubo) sub anthesi circ. 2 mm. longum et latum, stylo gracili circ. 1.8 cm. longo glabro, stigmate terminali globoso parvo.

CHINA. *W. Yunnan;* "On cliffs and forest trees, hills west of Lung-fan. Lat. 25° 54′ N. Long. 98° 33′ E. Alt. 7–8,000 ft. Epiphytic shrub of 3–4 ft. Flowers deep rich crimson, shaded to green at apex." In flower, May 1925. G. Forrest 26583. Type!

Same locality. "Flowers dull flame scarlet deepest at base and netted a deeper shade, tipped green." In bud, November 1925. G. Forrest 27755!

This very distinct plant may be easily separated from all known species by the small, scattered, ovate-lanceolate leaves, distinctly prolonged and narrowed towards the apex, and by the axillary yet several-flowered, sub-corymbose inflorescence. Possibly its nearest affinity is with *Agapetes Bulleyana*, Diels, which has a similar type of inflorescence, but from which its smaller, scattered foliage without a distinctly coloured and thickened border, as well as its larger more brightly tinted flowers, smaller bracts and broader calyx-teeth at once distinguish it.

Agapetes Lacei, Craib in Kew Bull. (1913), p. 43.

Previously known only from the Bhamo district, Upper Burma, where it was found in 1912 by J. H. Lace, this species has, since then, been obtained by George Forrest in China, his localities being in both Tibet and Yunnan. The details of this extended range, which carries the known distribution of the plant some distance north and a little east of the type locality, are as follows:—

CHINA. *S. E. Tibet;* "On trees in shady forests, Salween-Kiu Chiang divide, N.W. of Si-chi-to, Tsarong. Lat. 28° 24′ N. Long. 98° 30′ E. Alt. 10,000 ft. Pendulous epiphytic shrub of 1–2½ ft. Flowers scarlet-crimson." In flower and mature fruit, June 1922. G. Forrest 21597!

Yunnan; "On rocks and cliffs, N'Maikha-Salween divide. Lat. 26° N. Alt. 8–9,000 ft. Shrub of 2–3 ft. Flowers scarlet-crimson, tipped dull olive green." In flower, May 1919. G. Forrest 17912!

"On trees and boulders, N'Maikha-Salween divide. Lat. 26° N. Alt. 7,000 ft. Shrub of 2 ft. Flowers light crimson, tipped dark green." In flower, November 1919. G. Forrest 18816!

"On forest trees, hills N.W. of Tengyueh. Lat. 25° 25′ N. Long. 98° 30′ E. Alt. 7,000 ft. Epiphytic shrub of 2–3 ft. Flowers brilliant crimson-scarlet, tipped dull dark green, anthers orange." In flower, June 1925. G. Forrest 26690!

These additional gatherings of *A. Lacei*, Craib show but little difference from the type. One of the specimens from Tsarong has, however, rather narrower leaves than are usual, the proportions being about 16 mm. long × 5 mm. broad as compared with an average of

12 mm. × 7 mm. in the type. The most marked variation seems to occur in the indumentum of the pedicels, which are described in the type as "puberuli praetereaque pilis albis divergentibus glandulosis hic illic instructi." Amongst the Tsarong plants are some which exactly agree with this description; others, however, as well as part of the Yunnan material, have the pedicels pubescent but altogether devoid of the glandular setae; while in two of the gatherings from Yunnan the pedicels are entirely glabrous.

Agapetes oblonga, Craib in Kew Bull. (1913), p. 43.

Like the last, this species was discovered in the Bhamo district of Upper Burma in 1912 by J. H. Lace and, so far as the writer is aware, no other locality for it has been published. The following data, therefore, extending its range both north and east of the type locality and across the Chinese frontier into Yunnan, seem worthy of being recorded.

UPPER BURMA AND S.W. CHINA. *Upper Burma*; "Parasitic on Magnolia, etc., on very tall trees in the forest, Hpimaw, alt. 7,500 ft." Coming into flower, April 1919. R. Farrer 845!

"On rocks and cliffs in side valleys, western flank of the N'Maikha-Salween divide. Lat. 26° N. Alt. 8,000 ft. Shrub of 2–2½ ft. Flowers bright scarlet." In flower, May 1919. G. Forrest 17861!

"On forest trees, western flank of the N'Maikha-Salween divide near U-to. Lat. 26° 15′ N. Long. 98° 45′ E. Alt. 9–10,000 ft. Epiphytic shrub of 4 ft. Flowers rich satiny crimson." In flower, May 1925. G. Forrest 26570!

"On ledges of cliffs and on forest trees, hills around Tzi-tzo-ti. Lat. 25° 58′ N. Long. 98° 29′ E. Alt. 7,000 ft. Epiphytic shrub of 1–3 ft. Flowers very rich scarlet crimson." In flower, May 1925. G. Forrest 26584!

Yunnan; "On ledges of cliffs and humus-covered boulders, Shweli valley. Lat. 24° 50′ N. Alt. 5–6,000 ft. Shrub of 2–4 ft. Flowers dull crimson, fruit greenish-white." Passing out of flower, May 1912. G. Forrest 7980!

"Rocky situations, hills to the north-west of Tengyueh. Lat. 25° 10′ N. Alt. 7,000 ft. Flowers carmine tipped yellow." In flower, March 1913. G. Forrest 9778!

"Shady rocky situations, hills north of Tengyueh. Lat. 25° 20′ N. Alt. 8,000 ft. Shrub of 2–3 ft. Flowers bright scarlet-crimson, tipped green." In flower, March 1914. G. Forrest 12346!

"On rocks in shady side valleys, Shweli-Salween divide. Lat. 25° 30′ N. Alt. 9,000 ft." In flower, July 1913 (G. Forrest 11908) and June 1918 (G. Forrest 17707!). Also from the same neighbourhood, in flower, July 1917 (G. Forrest 15737!).

"Yunnan, alt. 3,000 ft." Without precise locality; in flower April 1913. Kingdon Ward 210!

While the foliage in some of the Yunnan gatherings (*e.g.*, Forrest nos. 9778 and 11908) is quite congruent with that of the type, in others from the same area, and in Mr. Farrer's Hpimaw specimens, it is relatively somewhat wider and varies considerably also in actual size, some leaves being, indeed, as much as 9.5 cm. in length by 3.5 cm. in breadth as against a maximum of 6 cm. by 1.9 cm. in the type. Despite these differences, the series leaves no doubt that all are referable to the one, apparently not otherwise variable, species.

Agapetes Unwinii, W. E. Evans, sp. nov. Plate CCXXI.

Inter species corolla apicem versus plus minusve curvata munitas haec *A. macrostemonis*, Clarke foliorum atque florum formam revocat; calyce multo majore cum ovario breviter albo-piloso, corollae lobis plus duplo longioribus, staminum filamentis multo longioribus parte inferiore inter se liberis et valde geniculatis ab illa differt.

Frutex sempervirens epiphyticus ad 30 cm. attingens, inflorescentia excepta glaber. Rami hornotini circ. 2–3 mm. diametro angulosi pallide brunnei, ad apicem foliis 3–5 atque ad basem squamis brunneis ovato-oblongis ad 5 mm. longis persistentibus exceptis nudi, squamarum sparsarum delapsarum cicatricibus notati. Folia subverticillata persistentia coriacea oblonga 6–11 cm. longa 2.3–4.3 cm. lata integra basi in petiolum crassum circ. 2 mm. longum subito rotundata vel subcordata apice attenuata acutissima subtus pallidiora venis venulisque in sicco prominentibus vena marginali haud conspicua. Racemi 8–12-flori breviter pedunculati subcorymbosi e foliorum verticillis terminalibus singulariter orti, pedunculo, bracteis, pedicellis, ovariis, calycibus breviter albo-pilosis; bractea brunnea lanceolata vel triangulari-lanceolata circ. 2 mm. longa; pedicelli circ. 1.5 cm. longi parte superiore vix ampliati cum ovario articulati. Flores magni; calycis circ. 8 mm. longi tubus ad 2 mm. longus 4 mm. latus, dentes anguste triangulares ad 6 mm. longi basi 2.5 mm. lati; corollae glabrae (ex collectore aurantiacae) venis saturatis haud pictae apicem versus curvatae tubus circ. 1.7 cm. longus ore 9 mm. latus, dentes valde circinato-curvati anguste triangulares circ. 11–13 mm. longi; staminum glabrorum circ. 3.5 cm. longorum filamenta inter se libera basem versus valde geniculata ad 2.2 cm. longa, antherae ad 1.5 cm. longae curvatae ecalcaratae cohaerentes basi caudatae apice in cornua sterilia exserta prolongatae; ovarium sub anthesi subglobosum circ. 2.5 mm. diametro stylo staminibus vix longiore gracili basem versus cum filamentis geniculato parte superiore curvato, stigmate parvo. Fructus immaturus globosus 8 mm. diametro parce pilosus calyce persistente haud accrescente praeditus.

BURMA. "Mount Victoria, 7,000 ft.; epiphytic, height 1 ft., flowers orange, young leaves red, conspicuous." In flower and immature fruit, April 1926. R. Unwin 3,047. Type!

The above interesting and beautiful addition to the genus *Agapetes* was discovered this spring (1926) by Professor R. Unwin of University College, Rangoon, during an expedition to Mount Victoria, the highest point in the Natmadaung Range, Pakokku Chin Hills, situated in lat. 21° 16′ N. and long. 93° 57′ E.

In general appearance much resembling *A. macrostemon*, Clarke, the present plant differs from that species in its suddenly rounded, sometimes almost cordate leaf base, which gives to the foliage, at first sight, the appearance of being sessile ; it is also characterised by the short, soft, white hairs covering somewhat thinly the peduncle, the bracts, the pedicels and the outer surface of the calyx. The most outstanding peculiarity of *A. Unwinii*, however, lies in the relatively very long filaments which, in addition to being free throughout their entire length, are strongly geniculate near the base where they form an almost S-shaped bend. The stamens, along with the style which they enclose, are thus caused to lie along the upper interior surface of the corolla-tube, an adaptation having, doubtless, some connection with effective pollination, but one not found in the allied species possessing a more or less curved corolla.

Agapetes Wardii, W. W. Sm. in Notes, Roy. Bot. Gard. Edin., viii, p. 330 (1915).

It may be of interest to record here two additional localities for this species, previously known only from the type, which was collected in the Kachin Hills, Upper Burma, the exact place in which it was discovered, however, not being stated.

UPPER BURMA. " Parasitic or on rock, Ngaw Chang Valley, Hpimaw. Alt. 7,000 ft. Flowers red." Coming into flower, April 1919. R. Farrer 829 !

" On forest trees and rocks, hills around Ku-lu. Lat. 26° 15′ N. Long. 98° 35′ E. Alt. 8,000 ft. Epiphytic shrub of 3 ft. Flowers rich crimson, tipped dull green." In flower, May 1925. G. Forrest 26547 !

The foliage in the Hpimaw material is more crowded than in the type, while the leaves are relatively rather broader, with the result that they are somewhat more suddenly narrowed above and consequently have the appearance of being more apiculate, but there is no other difference.

Agapetes yunnanensis, Franch. in Morot, Journ. de Bot., ix (1895), p. 366.

The following additional records of this species, originally found by Delavay " sur le mont Tsang-chan " in Yunnan, seem to be worth recording.

N.E. UPPER BURMA AND CHINA. *Upper Burma ;* " On trees in

forests, hills around Tzi-tzo-ti. Lat. 25° 58′ N. Long. 98° 29′ E. Alt. 8–9,000 ft. Epiphytic evergreen shrub of 2–3 ft. Branches pendulous, flowers rose-crimson." In flower, July 1925. G. Forrest 27145 ! In fruit, October 1925. G. Forrest 27406 !

Yunnan ; " On trees in forests, eastern flank of the range dividing the Taiping from the Irrawadi basins. Lat. 25° 20′ N. Alt. 8,000 ft. Epiphytic shrub of 12–15 inches. Flowers bright crimson." [Foliage only received.] September 1912. G. Forrest 9068 !

Desmogyne neriifolia, King et Prain in Journ. Asiatic Soc. Beng., lxix, p. 297 (1898).

Originally discovered in the Kachin Hills, this peculiar shrub has been again found in Upper Burma on two occasions.

UPPER BURMA. " On trees in forests, descent from the Sansi gorge to Sadon. Lat. 25° 25′ N. Alt. 7,000 ft. Shrub of 2–4 ft. Flowers dull crimson with a bluish bloom, striped a deeper shade." In flower, September 1912. G. Forrest 9107 !

" On forest trees, hills around Senia. Lat. 25° N. Long. 97° 40′ E. Epiphyte of 2–5 ft. Foliage leathery. Flowers fleshy, calyces pale rose, corollas dull creamy-yellow, heavily flushed, especially at base, magenta-rose, lined deep rose-crimson and marbled same towards apex, tipped clear blue." In flower, March 1926. H. I. Harding in Herb. G. Forrest 27784 !

Pentapterygium interdictum, Hand.-Mzt. in Anzeig, Akad. Wiss. Wien, Sonderabd. No. 27 (13th Decr. 1923), p. 7.
Text fig. 1, B.

Typical specimens of this interesting species were obtained by Mr. Forrest in 1925.

UPPER BURMA. " On forest trees, hills around Tzi-tzo-ti. Lat. 25° 58′ N. Long. 98° 29′ E. Alt. 7,000 ft. Epiphytic shrub of 2 ft. Flowers [calyx only] purplish-rose." In young fruit, May 1925. G. Forrest 26585 !

During the previous season, however, he had discovered, to the north of this locality, what appears to be a very distinct variety, of which the following details can be given :—

var. **stenolobum,** W. E. Evans, var. nov. Text fig. 1, A.

A typo non aliter nisi calycis fructiferis dentibus anguste triangularibus 1–1.3 cm. longis basi circ. 3 mm. latis differt.

UPPER BURMA. " On ledges and in crevices of cliffs, Salween-Kiu Chiang divide. Lat. 27° N. Long. 98° 35′ E. Alt. 10–11,000 ft. Evergreen shrub of 3 ft. Branches pendulous. Flowers? Fruits dull rich crimson." In fruit, July and October 1924. G. Forrest 25678 ! and 25802 !

It is unfortunate that the specimens referred to above, like the

original gathering of *P. interdictum* and the additional material of its typical form since obtained by Mr. Forrest, are in fruit, so that the structure of the flowers still remains unknown. So close, however, is the correspondence of the two forms in all available characters, other than the shape of the calyx-lobes, that they seem to be certainly only varieties of the one species, though the difference just mentioned is very marked in those examples so far seen.

Vaccinium venosum, Wight var. *hispidum*, C. B. Clarke, in Flor. Brit. Ind., iii (1882), p. 452.

This little known shrub has till now been recorded only from the alps of Sikkim and Bhotan, and its occurrence in China is therefore of no little interest.

CHINA. *S.E. Tibet;* "Shady situations in forests in side valleys, on banks and rocks and occasionally epiphytic; Salween-Kiu Chiang divide N.W. of Si-chi-to, Tsarong. Lat. 28° 24′ N. Long. 98° 30′ E. Alt. 9–10,000 ft." In fruit, May 1922 (G. Forrest 21596!); foliage only, October 1922 (G. Forrest 22839!).

W. Yunnan; "On ledges of cliffs in side valleys, Shweli-Salween divide. Lat. 25° 30′ N. Long. 98° 58′ E. Alt. 11,000 ft." Flowering almost over, May 1924. G. Forrest 24233!

Apart from the close and detailed agreement of these specimens with the published descriptions of the Himalayan plant regarded by C. B. Clarke as a variety of *Vaccinium venosum*, Wight, the excellent figure of the form, given in Griffith's Icones,* leaves no doubt as to the identity of the Chinese plant with it. From the typical *V. venosum* this variety differs in its smaller and relatively broader leaves, its shorter racemes and its distinctly hispid branchlets.

With increasing knowledge of the flora of that botanically rich area whence the present material came, the number of species linking it with that of alpine Sikkim and Bhotan is being thus slowly added to.

Vaccinium Nummularia, Hook. f. et Thoms. ex C. B. Clarke in Flor. Brit. Ind. iii (1882), p. 451.

UPPER BURMA. "On shady banks on the margins of thickets in side valleys, Salween-Kiu Chiang. Lat. 27° N. Long. 98° 35′ E. Alt. 12,000 ft. Prostrate shrub of 2–3 inches. Flowers waxy white." In flower, June 1924. G. Forrest 25654!

After careful examination of these specimens and their comparison with a number of gatherings of the species from Sikkim and Bhotan, no point of difference has been found by which they can be separated even varietally.

* Griff. Ic. Pl. Asiat., t. 507.

Agapetes burmanica, W. E. Ev., type specimen × ½.

R. M. Adam, photo.]

Agapetes Forrestii, W. E. Ev., type specimen × ½; at (a) is shown a dissection of the flower × 1.

R. M. Adam, photo.]

Agapetes Unwinii, W. E. Ev., type specimen × ½.

R. M. Adam, photo.