

**JCA**

**Trip No 3**

**Macedonia**

**22nd July - 25th August 1964**

**JCA302 - 770**

COLLECTIONS OF SEEDS AND LIVING MATERIALN. of Nis, Serbia

306. *Digitalis* sp.  
307. *Allium* sp.  
308. *Helleborus* ? odorus

Mt. Olympus, Thessaly, Greece

309. *Saxifraga media porophylla*  
('thessalica')  
312. *Iberis* ? *sempervirens* fm.  
314. *Saxifraga scardica*  
315. *Viola delphinantha*  
316. *Campanula oreadum*  
318. *Achillea* sp., silver lvs.  
326. *Doronicum* ? *columnae*.  
341. *Sempervivum reginae-amaliae*  
361. *Allium* sp., 2-3 in.  
362. *Muscari* sp., 2 in.  
363. *Euphorbia capitulata*  
364. *Gentiana verna* var. *pontica*  
366. *Globularia* ? *cordifolia* fm.  
367. *Edraianthus* ? *gaminifolius*  
368. *Veronica* sp.  
374. *Orchis* ? *macrostachys*  
380. *Viola delphinantha*  
383. *Viola gracilis*  
384. ? *Jasione* sp., cream  
385. *Jankaea heldreichii*  
409. *Dianthus haematocalyx* var.  
410. *Jankaea heldreichii*  
411. *Primula* sp. (Vernales)  
415. *Cistus villosus* fm.  
416. *Diosphaera dubia*.  
421. *Dracunculus vulgaris*

Peristeri, Pindus Mts., Greece.

427. *Helleborus cyclophyllus*  
428. *Juniperus* ? *oxycedrus*  
433. *Allium* sp., deep pink  
435. *Digitalis* sp. cream/brown  
443. *Pteroccephalus* sp. 3in., pink  
446. *Geranium cinereum* ssp.  
*subcaulescens*  
453. *Fritillaria* sp.  
454. *Saxifraga* sp. (porophylla?)  
455. *Asphodelus* ? *albus*  
459. *Linum* sp., 6in., yellow.  
461. ? *Erysimum* sp., pink  
467. *Aubrieta* ? *intermedia* fm.  
470. *Colchicum* ? *sibthorpii*  
471. *Aubrieta* ? *gracilis* fm.  
472. *Draba* ? *aizoides* v. *athoa*  
473. *Arabis* sp.  
474. *Euphorbia myrsinites*  
475. *Astragalus* sp.  
476. *Saxifraga aizoon* var.  
477. *Helleborus cyclophyllus*

N. of Metsovon, Pindus Mts.

478. *Digitalis* ? hybrid  
483. *Campanula* sp., 18in.  
488. *Fritillaria* sp.  
490. *Allium chalcedonicum*  
492. *Orchis maculata* fm.  
493. *Paris quadrifolia*

495. *Veratrum album* ?v. *flavum*  
496. *Actaea spicata*  
498. *Scilla bifolia* var.  
*subnivalis*  
500. *Allium flavum* v. *minus*  
504. *Pinguicula leptoceras*  
505. *Soldanella pindicola*  
508. *Buxus sempervirens*  
511. *Asphodelus* ? *microcarpus*  
512. *Acanthus spinosus*  
513. *Crocus* ? *chrysanthus*  
514. *Muscari* sp.  
515. *Ornithogalum* ? *nanum*  
516. *Arum* sp.

Mitschikeli, Pindus Mts.

517. *Malva/Althaea* sp. pink  
518. *Asphodeline* ? *liburnica*  
519. ? *Arum* sp.  
521. *Euphorbia* sp. 18 in.  
522. *Sambucus* ? *ebulus*  
523. *Muscari* sp. 2-3 ft.  
524. *Dracunculus vulgaris*  
525. *Allium* sp., white, 15 in.

Near Grevena, Greek Macedonia

- 528 *Scilla autumnalis*  
530. *Achillea* sp., 11in, silver

Near Siatista, Greek Macedonia

536. *Convulv*  
*Convulvulus* sp., prostrate  
537. ? *Inula* sp., silver lvs.  
538. *Hypericum* sp., 3 in.  
539. *Papilionaceae*, purple, 2ft  
540. *Campanula* sp., prostrate

Vermion massif & Kastoria,  
Greek Macedonia

541. ? *Helichrysum* sp., yellow  
545. *Hypericum* sp., 5in, yellow  
550. *Genista* sp., prostrate  
553. *Cytisus* sp., yellow, 6in.  
546. *Allium* sp., 18in, maroon  
561. *Campanula* sp., blue, 6in.  
563. ? *Ornithogalum* sp.  
564. Unidentified bulb  
565. *Muscari* sp.  
566. *Iris pumila*  
568. *Echium* ? *rubrum*

Pelister, Baba Mts.,  
Yugoslavian Macedonia.

569. *Euphorbia* sp. 1 ft.  
575. *Bruckenthalia spiculifolia*  
577. *Cytisus* sp., 1 ft.  
578. *Rosa* sp.  
586. *Caltha palustris* ssp. *laeta*  
591. *Jasione* sp., blue, 1-3in.  
592. *Campanula* sp., violet  
593. *Verbascum* sp., 30in.  
595. *Viola* sp., red-violet  
597. *Geum montanum*  
600. *Sempervivum octopodes*

601. *Lilium carniolicum*  
    ssp. *albanicum*  
602. *Sempervivum* sp.  
603. *Crocus* ? *veluchensis*  
606. *Linum* sp. 4in., yellow  
611. *Pedicularis* sp., cream  
615. *Minuartia* sp., 2in, white  
616. *Saxifraga* ? *cymosa*  
618. *Viola* sp. red-violet  
619. *Primula* ? *elatior intricata*  
620. *Campanula glomerata*  
625. ? *Anthemis* sp., silver lvs.  
626. *Fritillaria* sp.  
627. *Digitalis* sp., cream  
628. *Asphodelus* sp.  
644. *Lilium c.* ssp. *albanicum*  
649.

Galicica Mts., Yugoslavian  
Macedonia

649. *Allium flavum*  
651. *Linum* sp., pale violet, 9in.  
652. *Muscari* sp.  
653. *Allium* sp., pale violet, 8in  
655. *Colchicum* ? *doerfleri*  
656. *Allium* sp., blush-pink, 3in.  
659. *Salvia* ? *ringens*  
660. *Sempervivum ciliosum* fm.  
661. *Astragalus* sp.  
664. ? *Prunus prostrata*  
665. *Scilla autumnalis*  
666. *Rosa* sp.  
667. *Cotoneaster* ? *tomentosa*  
672. *Lilium martagon*  
673. *Saxifraga aizoon* fm.  
674. *Draba* sp.  
675. *Dictamnus albus* var.  
    *macedonicus*

Radika Valley & Gorge,  
Yugoslavian Macedonia

677. *Digitalis* sp.  
680. *Sempervivum heuffelii*  
686. *Ramonda serbica*  
688. *Sempervivum heuffelii*  
689. *Lilium martagon* .  
  
Popova Sapka & Pasina Glava,  
Sar Mts., Yugoslavian Macedonia  
  
699. *Euphorbia* ? *cyparissias*  
700. *Viola* ? *grisebachiana*  
704. *Daphne mezereum*  
706. *Dryas octopetala*  
708. *Sedum* sp., 4in., pale pink  
717. *Scabiosa* sp., 8 in., pink  
721. *Allium* sp., 3-6in., mauve  
725. *Veratrum album*  
727. *Dianthus* sp., 6in., pale pink  
728. *Sempervivum* ? *heuffelii*  
730. *Iris reichenbachii*  
731. *Linum* sp., deep violet, 9in.  
732. *Saxifraga aizoon* var.  
733. *Saxifraga* sp. (*Engleria*)  
734. *Saxifraga* ? *oppositifolia*  
    var. *meridionalis*  
736. *Centaurea* sp., blue/crimson  
737. *Scutellaria* sp. 6in, violet.  
738. *Labiatae*. 6in., cream  
740. *Helianthemum* sp., gold  
744. *Geranium* ? *reflexum*  
745. *Primula* ? *elatior intricata*  
750. *Campanula* sp., 8in, pale blue  
755. *Arabis alpina* ? ssp.  
    *flavescens*  
756. *Gentiana verna* form  
760. *Crocus* ? *scardicus*  
761. *Cerastium* sp. white, 3 in.

Treska Gorge, Yugoslavian Macedonia

769. *Sempervivum heuffelii*  
770. *Ramonda nathaliae*.

SUBSCRIBERS PLEASE NOTE :

- 1) THIS LIST IS ONLY A TEMPORARY 'STOP-GAP' MEASURE - to enable you to identify the material distributed to you. A complete copy of our field-notes will be sent to each subscriber about the second week in January, 1965. This is an innovation - albeit a rather time-consuming one - and I feel that it will add greatly to any interest in our work to have some account of all of our collections - not just the ones you receive.
- 2) Please do not write for further information regarding any collection until you receive the field-notes - if, then, you wish fuller details regarding any species I shall be glad to supply it. (I regret that I have had to pursue my usual policy of not replying to letters until I have the distribution completed - as this is now done, I shall be glad to deal with any enquiries. My apologies to those who have fallen victim to this harsh policy)
- 3) Please note that my address is now as under (though, of course, anything sent to my former address in Scotland will be forwarded)
- 4) Finally, a brief thanks to all who have given me their support I hope to write to you all more fully later. Thank you, again.

J.C. Archibald,  
Buckshaw Gardens,  
Holwell,  
SHERBORNE, Dorset, England.

23rd December, 1964

Quézel, P.

La végétation des hautes sommets  
du Pinde et de l'Olympe de Thessalie'

— 'Vegetatio acta Geobot.' XIV, 1-4 : 127  
(1967).

Quézel P. x Contandriopoulos J.

Candollea 20 . 51-90 (1965)

(Contrib. to the study of Pinde & Olympus fl.)

We feel that a plant-collecting expedition, which fails to provide adequate field-notes on the natural habitats of the plants collected is not only wasting much of its own effort but also allowing that of its supporters to do so. We have, therefore, decided to distribute our complete field-notes on the 1964 Balkan collections to all our subscribers. Many of these notes refer to plants of which collections of dried specimens only could be made but we hope that together they may help to build up a composite picture of the habitats of the seeds and bulbs collected and, in so doing, not only add much to the interest of subscribing but also make the task of growing many of these in cultivation much easier. May we then wish all who subscribed success in bringing a large percentage of our collections to the flowering stage and thank them again for their support of our work.

Buckshaw Gardens,  
Holwell, Sherborne,  
Dorset, England.

Jim and Janette Archibald.

February, 1965.

### FIELD-NOTES ON COLLECTIONS

#### NORTHERN GREECE AND YUGOSLAVIAN MACEDONIA, 1964.

22nd July, 1964.

near Mladenovac, Serbia,  
Yugoslavia.

302. Delphinium sp. (Consolida). 600 ft., near Mladenovac ; heavy clay among grass and cornfield stubble - numerous ; 12 - 18 in. ; violet.
303. Verbascum sp. As above ; in turf ; yellow ; 15 in.
304. Salvia sp. As above ; deep violet ; 12 in.
305. Nigella ? arvensis. Locality, altitude as above ; in cornfield stubble ; 8 in. ; greyish-white.

**D. CONSOLIDA**

302. Delphinium (Consolida) sp. 600 ft., near Mladenovac, Serbia ; heavy clay among grass and cornfield stubble - numerous ; I2-I8 in., violet.
303. Verbascum sp. <sup>POLYERATUM</sup> Locality, altitude as above ; stony clay in turf ; I5 in., yellow.
304. Salvia sp. Locality, altitude as above ; in turf ; I2 in., deep violet.
305. Nigella / arvensis. Locality, altitude as above ; among cornfield stubble ; 8 in., greyish white.
306. Digitalis sp. 800 ft., north of Nis, Serbia ; leaf-soil over clay in oak woodland ; 2-4 ft.
307. Allium sp. Locality, altitude as above ; among grasses and scrub at margins of woodland ; I8 in.
308. Helleborus ? odorus. Locality, altitude as above ; deep shade in oak woods ; leafsoil and moist clay.
309. Saxifraga media ssp. porophylla (S. 'thessalica'). 6,500 - 7,500 ft., Mt. Olympus, Thessaly, Greece ; common over a considerable altitudinal range - almost always in rock crevices. (see also JCA 38I).
310. Saxifraga sp. <sup>ARENARIA CRETICA</sup> 6,800 ft., Mt. Olympus ; prostrate mats in narrow fissures on slabs of hard limestone ; semi-shaded positions ; white flowers.
311. -
312. Iberis / sempervirens form. 6,800 ft., Mt. Olympus ; turfey, stony slopes and more stable screes ; prostrate woody stems creeping among stones and rising to 4-6 in. ; white shaded mauve to deep lilac
313. Viola gracilis. 6,700 - 7,100 ft., Mt. Olympus ; steep, grassy slopes beneath *Pinus heldreichii* ; from a central woody root-stock, many fine wiry stems thread among the grasses and rise to carry large, short-spurred flowers of luminous mauve-violet ; narrow, linear leaves ; 3 in. in height.  
(see also JCA 383)
314. Saxifraga scardica. 6,800 ft., Mt. Olympus ; habitat exactly similar to JCA 309 but restricted to higher altitudes. (see also JCA 382)
315. Viola delphinantha. 6,800 ft., Mt. Olympus ; NORTH-, east- and west-facing crevices and ledges on cliffs and rock slabs ; frequents a variety of situations but invariably saxatile.  
(see also JCA 380)

316. Campanula oreadum (C. rupicola var.?) 7,000 ft., Mt. Olympus ; razor-thin fissures and needle-sized apertures on vertical cliffs, usually facing east ; into these, the thick fleshy tap-root squeezes, pulling the close rosettes of rough, grey-green leaves tightly on to the naked rock, down which the thready stems of 1-3 in. in length, flop, each carrying one to three massive 'lamp-shade' bells of deep and penetrating violet-purple ; a superlative alpine and certainly the finest Campanula I have seen but a quite terrifyingly saxatile plant for which I should consider the 'hole-in-tufa' method of cultivation absolutely essential. **ASYNEUMA LIMONIFOLIUM**
317. ~~Campanula~~ sp. 7,000 ft., Olympus ; steep stony slopes and stable screes in clay ; tufted or slightly running habit ; spikes of pale mauve-blue flowers on 3-6 in. stems.
318. Achillea sp. ~~locality~~, altitude, habitat as above ; mats of narrow, very silvery leaves, with serrated edges above which white 'daisies' rise on 6 in. stems
319. Cruciferae. 7,000 ft., Olympus ; moist scree ; very glaucous fleshy leaves ; rose-pink flowers ; 2 in.
320. Orobanche sp. 7,000 ft., Olympus ; steep stony slopes facing south-east ; buff shaded and veined maroon ; 3 in. ; parasitic on grass-roots?
321. ~~? Jasione~~ sp. **SAPONARIA BELLIDIFOLIUM** 7,000 ft., Olympus ; steep slopes in short turf and among stones ; tufts of spatulate leaves ; cream flowers in rounded heads ; 6-7 in.
322. ~~Geranium~~ sp. **ASPERARIA CONFERVATA** 7,000 ft., Olympus ; screes and among stones ; prostrate annual ; white flowers.
323. Minuartia sp. **VERNA** 7,000 ft. Olympus ; stony places - usually slightly shaded ; white ; 2-3 in.
324. Alyssum sp. **SAXATILE** 6,000 - 7,000 ft., Olympus ; moist mountain detritus among large boulders ; yellow, 9 in.
325. Achillea sp. **UMBELLATA** altitude, locality, habitat as above ; dissected silver leaves ; white flowers ; 2-3 in.
326. Doronicum / columnae. 7,000 ft., Olympus ; wet mountain detritus ; numerous masses of plants creeping among the stones and debris all the way up a broad gully and forming masses of yellow ; 9 in.

- ~~SPECIOSUM~~
327. Cerastium ~~sp.~~ 6,800 ft., Olympus ; broad rock ledges in stony turf ; large white blooms ; 3 in.
328. Campanula rotundifolia. 6,800 ft., Olympus ; rock ledges and crevices ; deep violet ; 2-6 in.
329. Sedum ~~sp.~~ <sup>MAGELLENSE</sup> 6,800 ft., Olympus ; rich soil at bases of cliffs in shade ; white ; 5 in.
330. Polygala ~~sp.~~ <sup>nicaeensis</sup> (ssp. graeca) ; 7,000 ft. Olympus ; among long grasses and in turf ; bright pink flowers ; 3-10 in.
331. Cytisus hirsutus ssp. polytrichus var. demissus. 7,000 ft., Olympus ; among short, very stony turf in open positions ; flowers - buff-yellow ageing to deep apricot, shaded crimson ; prostrate.
332. Aubrieta gracilis var. thessala. 7,000 ft., Olympus ; among stones and between large boulders ; open situations ; pale mauve flowers ; 3-6 in.
333. Erigeron ~~sp.~~ <sup>POLYTRICHUS</sup> 7,000 ft., Olympus. ; in stony turf ; pale pinkish-lavender flowers ; 3 in.
334. Hypericum ~~sp.~~ <sup>PERFOLIATUM</sup> 6,600 ft., Olympus ; among grasses shaded by pines ; yellow ; 12 in.
335. Aquilegia amaliae. <sup>LOTTONS</sup> 6,500 - 7,000 ft., Olympus ; both in open situation facing north-east, among boulders and in detritus, and on damp rock ledges and fissures on north-facing cliffs ; large pendant flowers of pale sky-blue and white above tufts of exquisite leaves ; 6 in. (A delightful species - but I very much regret that no seed had been set on any of the plants we found).
336. Sedum ~~sp.~~ <sup>SARICORIANUM</sup> <sup>ssp. STRIBENTYI</sup> 6,600 ft. Olympus ; dryish positions in stony clay on rock ledges ; semi-procumbent stems rising to 3 in. ; large clusters of gold.
337. Scrophularia ~~sp.~~ <sup>SCOPOLI</sup> 6,700 ft., Olympus ; very moist position in mountain detritus containing much vegetable matter ; in shade of pines ; 2-3 ft.
338. Galium ~~sp.~~ <sup>ERECTUM</sup> 6,700 ft., Olympus ; moist, shady slope among long grasses ; white ; lax stems to 10 in.
339. Kinaria ~~sp.~~ <sup>PELAPONESIATA</sup> <sup>var. PARVASICA</sup> 6,500 - 6,800 ft., Olympus ; variety of situations - from dryish stony slopes to very wet mountain detritus ; usually open position but also semi-shaded ; rich cream flowers ; 6-12 in.
340. ? Oenanthe ~~sp.~~ 6,700 ft., Olympus ; wet, very stony debris ; white ; 12 in.



341. Sempervivum reginae-amaliae. 5,500 - 6,700 ft., Olympus ; at bases of boulders, ~~and~~ on open south-facing slopes but usually in thickets of Juniperus and Buxus - always among long grasses ; just coming into flower - pinkish ; extremely fine glaucous rosettes, tinged with plum-red.
342. Senecio ~~sp.~~ <sup>NEBRODENSIS</sup> 6,500 - 7,000 ft., Olympus ; moist places among boulders and debris ; golden-yellow - extremely decorative in mass ; 3-12 in.
343. Umbelliferae. ~~6,700 ft.~~ <sup>CARUM GRACILEM</sup> Olympus ; moist stony situations, semi-shaded ; white ; 15-20 in.
344. Anthericum ~~liliago~~ <sup>RAMOSUM</sup> 5,000 - 6,000 ft., Olympus ; among long grasses on south-facing slope, shaded by junipers or pines ; white ; 1 - 2 ft.
345. Salvia ~~ringens~~ <sup>ALPINA</sup> 6,000 ft. (probably extending from about 3,000 ft.) Olympus ; dryish positions on south-facing slopes in stony clay ; large deep violet-purple flowers ; 2 ft.
346. Erysimum ? olympicum. 6,500-6,700 ft., Olympus ; turfy and stony rock pockets and ledges ; large lemon-yellow flowers ; 3-4 in.
347. Pedicularis ~~sp.~~ <sup>RHINANTHUS RUBESCENS</sup> Locality, altitude, habitat as above ; in turf ; yellow ; 4-6 in.
348. Calamintha ~~sp.~~ <sup>ALPINA</sup> Locality, altitude, habitat as above ; procumbent ; reddish-violet.  $\frac{2}{3}$
349. Centaurea ~~sp.~~ <sup>PINDICOLA</sup> As above ; in short, stony turf flat rosettes of grey, tomentose leaves each bearing a single, large cream head ; 2 in.
350. Achillea ~~sp.~~ <sup>HOLOSERICIA</sup> As above ; stony turf ; coarsely cut, wooly leaves ; deep gold flowers ; 10 in.
351. Galium ~~sp.~~ <sup>ANISOPHYLLUM SP. ALPINO-BALCANICA</sup> As above ; in short turf ; thready tufts mingling with the grasses, white ; 3 in.
352. Scrophularia ~~sp.~~ <sup>LACINIOSA</sup> 6,700 ft., Olympus ; among stones and debris ; open east-facing situation ; Liver-brown flowers ; 10 in.
353. Stachys ~~sp.~~ Altitude, locality, habitat as above ; ~~magenta~~ flowers ; 6-8 in. - mauve-pink flowers
354. Potentilla ~~sp.~~ <sup>PINDICOLA</sup> As above but generally in more shaded positions among grasses ; yellow ; 12 in.
355. Labiatae. As above - among grasses in shade ; magenta ; 4 - 8 in.

- VULGARIS**
356. Silene ~~? cucubalus.~~ 6,700 ft., Olympus ; open stony areas ; white ; 6-12 in.
357. Dianthus sp. As above - also gravelly rock pockets but usually among long grasses ; white ; 10 in.
358. Dianthus haematocalyx. 6,400 ft., Olympus ; dryish places in gravelly clay, among stones and in short turf ; extremely variable - colour anything from paler pinks to deepish carmine ; prostrate to 4 in.
359. Genista ~~radiata.~~ 6,400 ft. (like JCA 358, this extends upwards from much lower altitudes) ; open sunny situations in clay - often in clearings among juniper scrub ; golden-yellow ; 12 - 15 in.
360. Daphne (alpina ssp.) oleoides ~~var.~~ glandulosa. 6,500 ft., extending upwards from lower altitudes ; low spreading clumps of semi-procumbent branches - habitat as above but also in stony turf ; cream-white flowers, orange fruits ; 3 - 6 in.
361. Allium sp. 6,400 - 6,600 ft., Olympus ; rock-crevices  
28th on south facing slope in clearings among junipers ; often associated with Sempervivums ; 2-3 in.
362. Muscari sp. Altitude, locality, habitat as above - also in short, stony turf ; 2 in.
363. Euphorbia capitulata. 6,700 - 6,900 ft., Olympus ; east and west-facing slopes, in rock pockets, and ledges, at bases of cliffs ; prostrate stems clad in blue-grey leaves thread among stones ; always among rock debris over clay (not deep scree) ; bright red seed capsules, ? lemon-yellow bracts ; a delightful, fragile little plant - very numerous.

28th July, 1964.

Mt. Olympus

364. Gentiana verna var. pontica. 7,000 ft upwards ; grass-filled ledges and turfey east and north-facing slopes - always among grass - often associated with Viola gracilis ; penetrating greenish-blue - both flowers and leaves large ~~foo~~ G. verna ; 2-3 in.
365. Thymus sp. 6,800 - 7,200 ft., Olympus ; many situations - usually sunny - most prevalent in gravelly south-facing crevices ; bright pink mats.

SSP. ~~ZELLIDIFOLIA~~

366. Globularia ~~/~~ cordifolia ~~form.~~ 6,800 ft. upwards, Olympus ; mats, 2-3 ft. across at bases of cliffs, and between rocks - south and east-facing slopes ; very floriferous - varying from paler blues to navy-blue ; 1-2 in. in height.
367. Edraianthus graminifolius ~~form.~~ 6,800 ft. and above, Olympus ; common in closer turf, in crevices and pockets ; up to six prostrate stems radiating from central tuft of grassy leaves ; violet flowers.
368. Veronica sp. Altitude, locality as above ; stems creeping and rooting among loose stones and vegetable debris in stream bed ; pale to deep blue ; 3-6 in.
369. Potentilla ~~/~~ deorum. Common from about 6,500 ft. upwards, Olympus ; exposed crevices in south and east-facing cliffs ; beautiful tufts of pure silver leaves, clusters of tiny buff-white ; 6-8 in.
370. Fragaria ~~sp.~~ <sup>VESCA</sup> 6,800 ft. and above ; east-facing slope, in deep shade beneath Pinus heldreichii, in loose, pine-needle soil ; white ; 6 in.
371. Saxifraga graeca. 6,800 ft., Olympus ; habitat as above - often among long grass ; white flowers speckled maroon ; 9 - 15 in.
372. Linum ~~sp.~~ <sup>SPATHULATUM</sup> 6,500 - 7,000 ft. and above, ; Olympus ; pockets of rich soil or leafmould under pines and on open, east-facing, grassy slopes ; exquisite, short-lived flowers of pale, lucid mauve-violet on prostrate stems from clumps of faintly glaucous leaves. (Again I regret - no seed).
373. ? Cardamine sp. Altitude, locality, habitat as 368 ; commonest species of the loose, wet macrain-like deposits in company with Ranunculus, Veronica and Myosotis ; white flowers ; 2-3 in.
374. Orchis ? macrostachys. 6,900 ft., Olympus ; east-facing slope in light woodland of Pinus ; among long grasses in leaf-soil ; very pale-pink ; 12-15 in.
375. Myosotis alpestris (olympica) Commonest around 7,000 ft. ; moist places, usually in slight shade, either among grasses with Gentiana verna (364) or in 'moraine' (see JCA 373) ; pure-blue ; 2-4 in.
376. Silene ~~sp.~~ <sup>MULTICAULIS</sup> 6,900 ft., Olympus ; very restricted habitat - in shaded rock-pocket under over-hang ; white flowers with fawn exteriors ; 4-8 in.

**SILENE PUSILLA**

377. ~~Caryophyllaceae~~. 7,000 ft., Olympus ; single specimen only located ; small clump in 'cave' on north-facing cliff ; pale-green foliage, white flowers
378. Saxifraga sp. 7,200 ft., Olympus ; rich, damp soil at bases of north-facing cliffs ; mats of bright, deep-green leaves covered with white flowers ; 3-6 in.
379. Pteridophyta. 7,000 ft., Olympus ; tiny fern in crevices on north-facing cliffs. **CYSTOPTERIS FRAGILIS**
380. Viola delphinantha. 6,800 - 7,200 ft., Olympus ; crevices on east-facing cliffs, in rock fissures, rock-pockets filled with pine-needles and stones ; sometimes in short grass over rock - woody root-stock always striking deeply into rock-fissures ; numerous - many clumps in flower, showing some variability in both form of flower and depth of colour - usually a clear-pink but tending to carmine.
381. Saxifraga media ssp. porophylla ('thessalica') 7,500 ft., Olympus ; shady crevices on east and north-facing cliffs ; dusky-red flowers among pinkish bracts ; 1-3 in. (herbarium material of 309)
382. Saxifraga scardica. Altitude, locality, habitat as above ; blush-pink ; 3-5 in. (specimens of 314).
383. Viola gracilis. 7,200 - 8,000 ft., Olympus ; grassy on north-facing cliffs ; among long grasses at bases of scrubby pines ; often associated with *G. verna* ;
384. **SAPONARIA BELLIDIFOLIA** (seed-collecting of 313)  
~~? Jasione sp.~~ 7,000 ft., Olympus ; gravelly pockets on south-facing cliffs (seed-collection of 321)

29th July, 1964.

Mt. Olympus

385. Jankaea heldreichii. 6,900 ft., Olympus ; narrow ledges on towering vertical cliffs, facing due east ; I believe the *Jankaea* has been mercilessly collected from this habitat and most plants grew in virtually inaccessible positions - however, a considerable amount of rock-climbing gave me a fair amount of seed of this high altitude colony ; still a few flowers at this altitude - description seem redundant but the colour was considerably deeper than that seen on cultivated specimens.

(see also JCA 410)

**HELDREICHII**

386. Euphorbia ~~sp?~~ amygdaloides. 7,000 ft., Olympus ;  
shady grassy area among Pinus heldreichii ; 20-30 in
387. Ranunculus ? brevifolius var. pindicus. 6,500 -  
- 8,000 ft., Olympus ; habitat as for 368 ; 6 in.
388. Sedum / album (ssp. athoum) 6,800 ft., Olympus ;  
dryish, stony ledges and slopes in open positions ;  
white flowers : 2 - 4 in.
389. Umbelliferae. 6,800 ft., Olympus ; turfy stony  
places - usually moist ; yellow ; 8-12 in.
390. Saxifraga sp. 6,900 ft., Olympus ; tufts of  
emerald leaves topped by small white flowers ;  
moist shady places in humus ; 1-2 in.
392. )  
393. ) Pteridohyta. Collections on north-facing cliffs  
394. ) of east-sloping gorge ; 6,800-7,000 ft., Olympus.  
395. )
396. Atropa belladonna. 7,100 ft., Olympus ; moist  
humus among pines ; creamish green to brown ; 3ft.

30th July

Olympus - Litochoron

**MACRARRHIZUM**

397. Geranium ~~sp.~~ 5,700 - 6,800 ft., Olympus ; a very  
common species of the wet screes and 'slides' of  
loose detritus ; glossy bright green leaves and  
masses of magenta-pink flowers ; 5 - 8 in.
398. Achillea sp. 5,800 ft., Olympus ; dryish, stony,  
south facing slopes ; white ; 1 ft.
399. Campanula sp. 5,500 ft., Olympus ; stony turf  
on east-facing slope ; purple ; running habit ; 3 in
400. Labiatae. 4,500 - 7,000 ft., Olympus ; open  
situations in turf or among stones - common ;  
CREAMY-yellow ; 3 - 9 in. ; strongly aromatic.
401. Thymus sp. Altitude, locality, habitat as above ;  
pale lilac ; 1-3 in.
402. Labiatae. Altitude, locality, habitat as above ;  
cream-coloured flowers ; 1-2 in.
403. Linum sp. 3,200 - 5,600 ft., Olympus ; grassy  
slopes - often in light shade ; yellow ; 4-6 in.
404. Linum sp. 5,500 ft., Olympus ; dryish, stony  
slopes ; palest mauve veined darker lilac ; 9 in.
405. ? Matthiola tristis var. thessala. 5,000 ft.,  
Olympus ; very dry stony slopes - south facing -  
among rocks ; buff-yellow ; 6 in.

**SIDERITIS**

406. Stachys sp. Altitude, locality, habitat as 405 ;  
 Creeping, grey-leaved mats ; magenta  $\frac{1}{2}$  I-4 in.
407. Cephalanthera rubra. 4,000 - 4,700 ft., Olympus ;  
 in pure leafmould and deep shade in mixed woods  
 of Fagus silvatica and Abies cephalonica ; 3-8 in.
408. Neottia nidus-avis. Altitude, locality, habitat  
 as above ; 3 - 6 in.
409. Dianthus haematocalyx. 3,800 ft., Olympus ;  
 DRY, clay slope, facing south-east - very gravelly  
 soil ; variable in colour ; prostrate (see 358).
410. Jankaea heldreichii. 3,600 ft., Olympus ; ledges  
 on vertical cliffs of hard limestone - often  
 under slight overhang - in soil consisting of  
 black, peaty humus, slightly sandy - usually only  
 an inch or so deep and covered over with a thick  
 growth of moss ; the whole almost entirely dried  
 out and the silver, shrivelled rosettes sitting  
 flat on the dried moss ; the plant is relatively  
 numerous in this station, provided one is  
 prepared to do some rock-climbing and scrambling  
 through the very thick scrub along the bases of  
 the cliffs ; sadly, most of the plants anywhere  
 near the path seem to have been removed, though  
 several grow high above it ; the cliffs face  
 due north and are also shaded by adjacent trees ;  
 seed-capsules were already gaping and almost  
 empty here but we secured a fairly good amount of  
 seed, which I hope my subscribers will succeed with.
411. Primula sp. (Vernales Section) around 3,500 ft.,  
 Olympus - above Prioni ; beech-woodland and open  
 grassy areas ; the primroses on Olympus may be  
 hybrids but as they vary to creamy-white shades  
 may be worth trying.
412. Pinguicula leptoceras. 3000 ft., Olympus - on  
 limestone cliffs in wet moss-tuffets, around  
 hole where the spring rushes out at Prioni ; pale  
 lavender flowers ; 2-3 in.
413. Campanula sp. ~~Prioni~~ 3,000 ft., Olympus - Prioni ; in  
 scrub ; blue ; 12-18 in. but chewed by goats.

414. Thalictrum minus (var. olympicum) 3,200 ft.,  
Olympus - western end of Enipeus Gorge ;  
dry stony places and among grasses - usually  
in shade ; 1 ft.
415. Cistus villosus form. 3,000 - 5,000 ft.,  
Olympus (extending upwards from much lower  
altitudes) ; sunny, stony places in clay ; 1 ft.
416. Diosphaera dubia. 4,000 ft., Olympus - Enipeus  
Gorge ; fissures in vertical south-facing cliffs -  
extremely hot and dry ; pale blue ; 4-6 in.
417. Asphodeline liburnica. 4,200 ft., Olympus -  
Enipeus Gorge ; clearings on wooded slopes and  
sunny south-facing places in scrub ; yellow ; 3-4ft
418. Salvia sclarea. 4,000 ft., Olympus, Enipeus Gorge ;  
dry, stony situations ; blue-white flowers among  
mauve-pink bracts ; 1 ft.
419. Malva sp. ~~Sylvestris~~ Altitude, locality, habitat as above ;  
rose-pink, darker veins ; procumbent stems.
420. Campanulaceae. 4,000 ft., Olympus - Enipeus Gorge ;  
crevice in east-facing cliff ; pale blue ; 8-12 in.

31st July, 1964

Litochoron

421. Dracunculus vulgaris. 800 ft., vicinity of  
Litochoron ; south-facing slope in stony clay -  
usually among scrub.
422. Allium sp. Altitude, locality as above ; dry  
rock crevices ; 1 ft.
423. ? Asphodelus sp. As above.

3rd August, 1964

Peristeri, Pindus Mts., Epirus

427. Helleborus cyclophyllus. 3,500 ft. grassy slopes
428. Juniperus ? oxycedrus. extending up to 5,800 ft.,  
Peristeri ; numerous ; (specimens misplaced.)
429. Cephalaria sp. ~~Amphosoides~~ 2,800 ft., gorge below Metsovon  
towards Peristeri ; south-facing slope among  
scrub ; creamy white flowers ; 5 ft.
430. Sedum sp. ~~Semina~~ 3,800 ft., approach to Peristeri ; deep  
shade under beeches in humus ; pale green leaves  
and white flowers ; 3-10 in.

- ~~SYLVESTRIS~~
431. Dianthus ~~sp.~~ 3,500 - 4,500 ft., approach to Peristeri ; meadow-plant - turfy areas among rocks and among long grass ; pale to deep pink; 1 ft.
432. Linum ~~sp.~~ <sup>TENUIFOLIUM</sup> Altitude, locality, habitat as above ; pale mauve veined darker lilac ; 1 ft.
433. Allium ~~sp.~~ <sup>VINEALE</sup> Altitude, locality, habitat as above ; deep pink ; 2 ft.
434. Silene ~~sp.~~ 4,500 ft., approach to Peristeri ; dry rock crevices in clay ; white ; 6 in.
435. Digitalis ~~sp.~~ <sup>LAEVIGATA</sup> 4,000-6,000 ft., Peristeri ; in mixed woodland at lower altitudes but in fully exposed stony turf at alpine level ; cream flowers shaded tawny apricot and veined brown ; 2 ft.
436. Allium ~~sp.~~ <sup>ARIENSE</sup> 4,500 ft., Peristeri ; dry, south-facing slope among rocks ; greyish white ; 1 ft.
437. Anthyllis ~~sp.~~ <sup>VULNERARIA Ssp. PINDICOLA</sup> 4,000 ft., Peristeri ; turf pockets among rocks ; blue-green leaves ; yellow ; 1 ft.
438. Achillea ~~sp.~~ <sup>HOLOSERICA</sup> 4,000 ft., Peristeri ; stony turf ; yellow flowers ; 1 - 2 ft.
439. Chrysanthemum ~~sp.~~ <sup>TANACEUM Ssp. CINEREUM</sup> Altitude, locality, habitat as above ; white flowers ; 2 ft.
440. Hieracium ~~sp.~~ <sup>PANNICULUM</sup> As above ; yellow ; 12 - 18 in.
441. ? Thymus ~~sp.~~ As above ; dry rock crevices in gravelly clay ; white flowers ; 4 in.
442. Asperula ~~sp.~~ <sup>LONGIFLORA</sup> 6,300 ft., Peristeri ; west-facing slope among tall grass ; pink ; 13 in.
443. Pterocarpinus ~~sp.~~ <sup>SCABIOSA CRENATA</sup> 6,500 ft., Peristeri ; broad ledges on a single south-west-facing cliff of rotten, crumbling schist - numerous in this one habitat but not seen elsewhere ; prostrate woody mats of little, gnarled branches covered with dissected grey-green leaves ; pale pink flowers borne on 3-4 in. stems.
444. Erigeron ~~sp.~~ <sup>POLYMERPHUS</sup> 6,500 ft., Peristeri ; semi-shady rock-pockets ; lilac-pink ; 3 in.
445. Dianthus ~~sp.~~ <sup>SYLVESTRIS</sup> 6,500 ft., Peristeri ; open west-facing slope among grass ; pale-pink ; 1 ft.



446. Geranium cinereum ssp. subcaulescens. 6,500 ft., Peristeri ; open east-, west-, and north-facing slopes ; as variable in its choice of habitat as in its own habit - usually in short turf or in rock-pockets ; all forms of good colour but vary much in size of flower and stature - 4-6 in.
447. Linum sp. 6,600 ft., Peristeri ; turfey slopes facing west ; yellow ; 5-8 in.
448. Sedum ~~sp.~~ album. 6,500 ft., Peristeri ; dry south west crevices on schist ; white ; procumbent.
449. Sedum ~~sp.~~ <sup>ANATOLICA</sup> As above but slightly shadier places ; blue-green leaves, palest pink flowers ; 1 in.
450. Geranium ? robertianum. 6,500 ft., Peristeri ; damp, grassy crevices in shade ; magenta ; 1 ft.
451. Viola sp. As above ; yellow ; 6 in.
452. Euphrasia ~~sp.~~ <sup>ILLYRICA</sup> As above ; lilac ; 3 in.
453. Fritillaria sp. 6,500 ft., Peristeri ; very steep slope facing due north in damp clay and among long, lush grasses ; in seed ; 8 in.
454. Saxifraga sp. (? porophylla form) 6,600 ft., Peristeri ; west-facing schistose crevices.
455. Asphodelus ? albus. 6,600 ft., Peristeri ; steep west-facing slope - in turf ; 3 ft.
456. Erysimum sp. Altitude, etc. as for 454 ; 4-5 in.

4th August, 1964.

Peristeri, Pindus Mts.

457. Parnassia palustris. 6,500 ft., Peristeri, wet stony turf by stream ; white ; 3-10 in.
458. Senecio ~~sp.~~ <sup>APP. VERNALIS</sup> 6,500 ft., Peristeri ; damp rock crevices ; yellow ; 6 in.
459. Linum sp. (seed collection of 447 which see)
460. Campanula glomerata. 6,600 ft., Peristeri ; open grassy slopes ; purple ; 10 in.
461. ? Erysimum sp. <sup>MALCOLMIA FLEXUOSA</sup> 6,300 - 7,000 ft., Peristeri ; extremely loose schistose scree, rooting into clay some distance underground ; bright mauve - pink flowers ; 4 - 9 in. (an attractive plant in the wild, where all specimens had been cut down by the numerous goats but I suspect that it may grow taller in cultivation - how much I do not know)

462.

~~HIRTA VAR. PEDATA~~

462. Potentilla sp. 6,900 ft., Peristeri ; steep slope in long grass ; yellow ; 1 ft.
463. Polygala sp. <sup>NICAENSIS</sup> 7,000 ft., Peristeri ; in turf - clay ; magenta-pink ; 4 in.
464. Erigeron sp. <sup>POLYMERUS</sup> 7,000 ft., Peristeri ; rock crevices among grass ; lilac-pink ; 4 in.
465. Campanula rotundifolia. Altitude, locality , habitat as above ; purplish blue ; 6-7 in.
466. Scorzonera sp. <sup>PURPUREA</sup> 7,200 ft., Peristeri ; open east-facing slope in very short turf over clay ; narrow, grassy leaves ; blush-pink ; 1-3 in.
467. Aubrieta ? intermedia form. 7,300 ft., Peristeri ; sandstone crevices and among boulders in north-east facing gully ; close tufts with reddish mauve flowers - the yellow 'eye' ageing to red, 2 in.
468. Campanula sp. <sup>RADICATA</sup> Altitude locality, habitat as 466 ; prostrate stems bearing blue-purple flowers.
469. Potentilla sp. <sup>SPECIOSA</sup> 7,300 ft., Peristeri ; crevices on massive, sloping slab of sandstone ; forming woody clumps ; creamy white flowers ; 2-4 in.
470. Colchicum ? sibthorpii. 6,600 ft., Peristeri ; among long grass by stream side in damp clay.
471. Aubrieta ? gracilis form. 6,700 ft., Peristeri ; north-west facing schistose crevices - clumps of dark green leaves ; not in flower.
472. Draba ? aizoides var. athoa. Altitude, locality, habitat as above ; compact tufts.
473. Arabis sp. Data as above.
474. Euphorbia myrsinites. 7,200 ft., Peristeri ; dry south-facing slopes in stony clay.
475. Astragalus sp. 7,200 ft., Peristeri ; exposed south-facing slope in dry rock crevices and stony clay ; rounded 'hedgehog' hummocks to 6 in. ; not in flower - possibly white, however.
476. Saxifraga ? aizoon var. 7,100 ft., Peristeri ; shady crevices on east-facing cliffs.
477. Helleborus cyclophyllus. 7,000 ft. Peristeri ; very steep east-facing slope below cliffs - in stony turf among long grasses and in rock debris over clay ; 9 - 18 in. clumps.

5th August, 1964

Area north of Metsovon, Pindus Mt

- Digitalis hybrid. 5,000 ft., north of Metsovon ;  
478. meadow-land and deciduous woodland ; cream flowers  
veined brown but variable ; possibly hybrid  
between Digitalis spp. JCA 435 and 479. ; I-2 ft.
479. Digitalis sp. <sup>AMBIGUA</sup> Altitude, locality as above ;  
woodland ; creamy white flowers ; 2 ft.
480. Geranium sp. <sup>NOBISII / VERSICOLOR</sup> Altitude, locality as above ;  
shady banks in woodland ; white flowers veined  
with purple ; 6-9 in.
481. Chrysanthemum sp. <sup>LEUCANTHEMUM VULGARE</sup> Altitude, locality as above ;  
open meadow-land among grasses ; white ; I ft.
482. Campanula sp. <sup>ATROA</sup> Altitude, locality, habitat as  
above ; purple ; 30 in.
483. Campanula sp. <sup>SPARSA</sup> Altitude, locality, habitat as  
above ; a beautiful species with many slender  
stems clad in showers of small violet flowers ;  
unfortunately it looks biennial ; 18 in.
484. Inula sp. <sup>OCULUS-CHRISTI</sup> Altitude, locality, habitat as above ;  
deep yellow flowers ; 15 in.
485. Centaureum sp. <sup>UMBELLATUM</sup> Altitude, locality, habitat as  
above ; bright pink flowers ; 10 in.
486. Euphrasia sp. <sup>PECTINATA</sup> Altitude, locality as above ;  
open turf slopes ; pale lilac ; I-3 in.
487. Silene sp. <sup>PARADOXA</sup> Altitude, locality as above ; sunny  
rock crevices in turf ; white or pinkish ; I2-I8 in.
488. Fritillaria sp. 5,300 ft., north of Metsovon ;  
single capsule located in dense thicket - stony clay.
489. Gentiana sp. <sup>CREPULATA</sup> 5,300 ft., north of Metsovon ;  
among grasses in deep shade of deciduous woodland ;  
pale sky-blue flowers tinged pale green ; 15 in.
490. Lilium chalcedonicum. 5,000 ft., north of Metsovon ;  
south-facing slopes among long grass and scrub in  
damp clay ; brilliant orange-scarlet flowers of  
waxy texture ; I2-36 in. ; usually single-flowered.
491. ? Anthyllis sp. 5,000 ft., north of Metsovon ;  
south-facing crevices ; semi-procumbent ; yellow ?
492. Orchis maculata form. 5,100 ft., north of Metsovon ;  
very wet stony leafmould by stream in woodland ;  
lilac flowers ; 12 in. or taller.

493. Paris quadrifolia. 5,100 ft., north of Metsovon ; very wet banks and grassy places in deciduous woodland by stream ; pale green - in fruit single black berry ; 1 ft. (Anyone interested in raising this curious and, I think, rather lovely plant, should note that it takes a very long time to germinate - probably needing a period of 'double dormancy' like its relatives, the Trilliums ; treatment in a refrigerator could overcome this).
494. Parnassia palustris. 5,000 ft., as above ; sunny wet places in turf by stream ; white ; 5 - 11 in.
495. Veratrum album ~~var.~~ flavum. 5,100 ft., as above ; open meadow-land in wet clay and streamside ; yellow-green flowers ; 3-5 ft.
496. Actaea spicata. 5,100 ft., as above ; moist deciduous woodland among grasses ; rather rare - two plants only seen ; black berries ; 2 ft.
497. ~~Sanguisorba sp.~~ <sup>POTERION OFFICINALE</sup> 5,100 ft., as above ; wet grassy place in clay by stream ; dark maroon ; 2 ft.
498. Scilla bifolia var. subnivalis. 5,200 ft., north of Metsovon ; open turfy slopes in clay.

6th August, 1964

Katara, Pindus Mts.

499. Dianthus haematocalyx ssp. pindicolus. (=D. pindicus) 5,700 ft., Katara ; exposed, windswept summit col in thin gravelly clay - almost scree - over schist or in crevices ; variable in colour from pale to deep carmine-pink, usually backed with yellow-green, and in stature from ½ in. woody caespitose hummocks covered in flower to 4 in. clumps of branching stems - all lovely!
500. Allium flavum var. minus. Altitude, locality as above ; schist crevices ; 2-4 in., yellow.
501. Alyssum sp. 5,700 ft., Katara ; slightly sheltered depression below exposed col ; dry clay among stones white flowered, woody-stemmed clumps ; 18-24 in.
502. Alyssum sp. - double-flowered form of above.
503. Pinguicula ~~leptoceras~~ <sup>HISTIFLORA</sup> 5,500 ft., west of Katara ; north-facing slope in dense shade of beech-trees - on sopping-wet bank of stony alluvium and leafmould by stream and with water percolating through it ; exquisite lavender flowers ; 3-4 in.

505. Soldanella pindicola. Altitude, locality, habitat as for 504 ; associated only with Pinguiculas and mosses in the wettest conceivable situation and extremely deep shade ; multitudes of creeping rooting stems and round leaves but not a sign of a flower or seed-head!
506. ? Cardamine sp. Altitude, locality as above ; among stones and mosses in running water ; white, 6"
507. Orchis maculata. Data as above ; lilac ; 12-18 in.
508. Buxus sempervirens. 5,306 ft., west of Katara ; stony south-west facing slopes ; 2-3 ft. thickets.
509. Neottia nidus-avis. 5,200 ft., west of Katara ; dense, dry shade in beech-woods ; 8 in.
510. Orobanche sp. 5,200 ft., west of Katara ; dry stony place among grasses ; 8 in.

8th August, 1964.

Metsovon-Ioannina-Metsovon

511. Asphodelus ? microcarpus. 2,500 ft., eastern slopes of Mitschikeli massif, Pindus Mts., hot south-east facing slope in clay ; 4 ft.
512. Acánthus spinosus. 2,000 ft., east of Mitschikeli ; dry banks and ditches - clay ; extremely spiny form (? var. spinosissimus) ; 3 ft.
513. Crocus ? chrysanthus. 5,000 ft., north of Metsovon Pindus, Mts. ; north-east facing slope in turf - clayey loam.
514. ? Muscari sp. Data as above.
515. Ornithogalum ? nanum. Data as above.
516. Arum sp. Altitude, locality as above ; clayey loam in hawthorn thickets.

10th August, 1964.

Mitschikeli, Pindus Mts.

517. Malva sp. (? Althaea sp.) 2,800 ft., Mitschikeli ; extremely hot and dry south-west facing slope in clay at base of limestone boulders ; towering wands of huge satin, pink 'hollyhock' flowers, 5-7 f
518. Asphodeline ? liburnica. 2,600 - 3,000 ft., Mitschikeli ; S.W.-facing slope in thin clay over limestone ; 2 ft.

519. ? Arum sp. 2,800 ft., Mitschikeli ; among limestone boulders in shade at bases of cliffs.
520. Phlomis sp. <sup>FRUTICOSA</sup> 2,500-3,000 ft. - probably higher. ~~How?~~ DRY CLAY SLOPES over limestone ; yellow flowers - principal constituent of vegetation.
521. Euphorbia sp. <sup>SEQUIZIANA SSP. NICICIANA</sup> 2,500 ft., Mitschikeli ; south-west facing slopes in clay over limestone and among rocks ; narrow grey-green leaves, golden-green bracts ; 15-18 in. many-stemmed clumps.
522. Sambucus ? ebulus. 2,500 ft., Mitschikeli ; masses of 3-6 ft. stems - reddish black berries.
523. Muscari sp. 2, 800 ft., Mitschikeli ; narrow ledges and fissures on hot, south-facing limestone cliff ; the old stems rising to 2-3 ft.
524. Dracunculus vulgaris. 2,800 ft. Mitschikeli ; among low scrub at base of limestone cliffs.
525. Allium sp. 2,800 ft., Mitschikeli ; among limestone rocks ; 12-18 in. ; white.

12th August, 1964.

Metsovo-N. of Grevena,  
Greek Macedonia.

526. Convolvulus sp. <sup>HIRSUTUS</sup> 2,200 ft., south of Grevena, Macedonia ; clay over limestone on west-facing slope ; trailing stems among grass ; pink.
527. Echinops sp. <sup>MICROCEPHALIS</sup> Altitude, locality, habitat as above ; AMONG LIMESTONE lumps - part shaded ; blue ; 1 ft.
528. Scilla autumnalis. Altitude, locality as above ; semi-shaded , turfey places among scrub in very heavy, stony clay ; pale to bright-blue.
529. Scabiosa sp. <sup>TRENASTELIA PALAESTINUM</sup> 1,800 ft., south of Grevena ; hot dry banks in clay ; pale lilac ; 1 ft.
530. Achillea sp. <sup>COARCTATA</sup> Altitude, locality, habitat as above ; also in corn-field stubble ; beautiful dissected 'filigree' silver leaves ; yellow ; 10-12 in.
531. Ajuga chamaepitys. Altitude, locality, habitat as above ; yellow ; 2 in.
532. Centaurea sp. <sup>LATISQUAMA SSP. SALONITANA</sup> Altitude, locality as above ; dry ditches in stony clay ; bright lemon-yellow ; 15 in.
533. Delphinium sp. <sup>BALCANICUM</sup> As above ; in cornfield stubble in clay ; deep purple flowers ; 9 in.

XERANTHEMUM ANNUM

534. Compositae. I, 500 ft., north of Grevena ; open west-facing slope in very gravelly clay ; deep silvery-pink flowers ; 8-12 in.
535. Inula sp. <sup>BRITANNICA</sup> 1,500 ft., north of Grevena ; among low herbage and scrub ; deep gold ; 2-6 in.

13th August, 1964.

Grevena-Kastoria, Macedonia

536. Convolvulus sp. <sup>TENUISSIMUS</sup> 3,000 ft., south-west of Siatista ; steep slope facing west and south - open and very hot and dry ; clay under limestone scree and boulders ; prostrate stems, from six to twelve ins. in length clothed in small glistening silver leaves and bearing up six flat flowers of pale pink, each 1 in. across.
537. Inula sp. <sup>ASCARIPSONIANA</sup> Altitude, locality as above ; south-facing crevices in limestone boulders ; clumps of pure-white, felted leaves ; small yellow heads on 1 ft. stems (flowers absolutely worthless)
538. Hypericum sp. Altitude, locality, habitat as for JCA 536 - usually in crevices ; 3 in.
539. Papilionaceae. <sup>PSORALEA BITUMINOSA</sup> Altitude, locality, as above ; limy clay in shade of olive-tree ; clumps of leafy, almost woody, stems topped by violet-purple flower-clusters ; 2 ft.
540. Campanula sp. Altitude, locality as for above ; partly shaded limestone crevices in clay, prostrate.

14th August, 1964.

South-west of Vermion massif,  
Greek Macedonia.

541. Helichrysum sp. <sup>PLICATUM</sup> (? Anaphalis). 3,500 ft., Vermion massif ; dry limestone slopes, facing east and west in stony clay ; bright lemon-yellow bracts around the tuft of deep gold florets ; numerous small flower-heads on 6-9 in. semi-woody stems.
542. Jasione sp. <sup>HELICRYSI</sup> Habitat as above ; 1 ft. ; deep blue.
543. Scabiosa sp. <sup>OCHELEDA</sup> Habitat as above ; 18 in. ; cream.
544. Achillea sp. <sup>CONCINNA</sup> Habitat as above ; 9-18 in. ; gold

545. ~~OLYMPICUM~~  
*Hypericum* sp. 2,900-3,500 ft., Vermion massif ; open dry slopes in gravelly clay, usually nestling close to a limestone boulder ; upright or semi-procumbent growth ; large gold flowers ; 4-6 in.
546. ~~SPHAEROCEPHALUM~~  
*Allium* sp. 3,800 ft., Vermion ; west-facing gully among hawthorn-scrub ; maroon balls on 1-2 ft. stems
547. *Hypericum perforatum* (ssp. *vermense*) Habitat as above - dry clay sides of gully ; yellow ; 5-12 in.
548. ~~OCULUS-CHRISTI~~  
*Inula* sp. Habitat as above ; deep gold ; 6-9 in.
549. *Dianthus* sp. 3,800 ft., Vermion ; west-facing limestone crevices ; pale pink ; 4-8 in.
550. ~~CARINALIS~~  
*Genista* sp. 2,800 ft., Vermion ; east-facing slopes of gravelly clay among limestone slabs ; prostrate rush-like stems clothed in sparse, tiny dark green linear leaves ; racemes of small golden yellow flowers.
551. ~~DALMATICA~~  
*Linaria* sp. 2,700 ft., Vermion ; north-facing gully in dry clay ; yellow ; 1 ft.
552. ~~AFF. GLAUCA~~  
*Euphorbia* sp. Habitat as above ; grey-green leaves, yellow-green bracts ; 1 ft.
553. ~~NISIRICANS~~  
*Cytisus* sp. 3,700 ft., Vermion ; margins of beech woods on north-west-facing slope ; clay and leafmould over limestone ; yellow racemes ; 6 in.
554. ~~Medicago~~ sp. 3,800 ft., Vermion ; shady gully in beech-wood ; leaf-soil over limestone ; yellow.
555. ~~INERMIS~~  
*Lathyrus* sp. Habitat as above ; purple ; 8 in.
556. ~~LEPIDA~~  
*Sedum* sp. Habitat as above ; pinkish white ; 7 in.
557. ~~SPARSA~~  
*Campanula* sp. 3,600 ft., Vermion ; open, moist meadowland, in clay ; violet ; 6-12 in.
558. *Viola* sp. 3,600 ft., Vermion ; at bases of large, north-facing limestone boulders in deep shade.
559. ~~VISCIDUS~~  
*Dianthus* sp. 3,600 ft., Vermion ; moist turf by streamside - open position in clay ; clusters of carmine-red flowers ; 4 - 15 in.
560. ~~ORPHANIS~~  
*Viola* sp. Habitat as above ; small mauve-blue flowers shaded cream ; straggling 1 ft. stems.
561. ~~LINGULATA~~  
*Campanula* sp. 3,500 ft., Vermion ; moist turf and wet clayey gravel by stream ; royal-blue flowers on 6 in. stems. (brilliant plant but looks biennial)



562. Lysimachia punctata. 2,500 ft., Vermion ;  
very wet west facing bank ; yellow ; 2-3 ft.

15th August, 1964.

Kastoria, Greek  
Macedonia

563. ? Ornithogalum sp. 2,400 ft., south facing slope  
on limestone promontory projecting into Lake  
Kastoria and to the east of the town ; shallow  
pockets of 'terra rossa' on limestone.
564. Unidentified bulb - habitat as above.
565. Muscari sp. - Habitat as above ;
566. Iris pumila. Habitat as above. (Some of the  
Macedonian forms of I. pumila are extremely  
dwarf, large-flowered little plants ; this one  
certainly had very short leaves and looked most  
interesting - I shall be glad to hear of flowers).
567. Campanulaceae. Locality, altitude as above ;  
deeply shaded, vertical limestone cliffs ;  
pale-blue flowers ; 30 in.
568. ~~Behium~~ ~~alatum~~ <sup>ANCHUSA HYBRIDA</sup>. 4,000 ft., north of Klissoura,  
Greek Macedonia ; east-facing limestone cliff ;  
clumps of rough, hairy leaves ; ruby-violet ; 1 ft.

16th August, 1964.

Pelister, Baba Mts.,  
Yugoslavian, Macedonia

- <sup>AMYGDALOIDES</sup>  
569. Euphorbia sp. 5,000-7,000 ft., Pelister ; W.N.W.-  
facing hillside in grassy clearings of  
coniferous woodland ; creamy green bracts, dark-  
green leathery leaves ; 6-12 - 18 in.
570. Geranium sp. <sup>MACRORIZUM</sup> 6,000 ft., Pelister ; west-facing  
slope ; in pockets of humus among conglomeration  
of massive schist boulders ; large, glossy leaves,  
small bright magenta flowers ; 1 ft.
571. Thymus sp. Habitat as above - especially in  
turfy, debris-filled depressions ; lilac ; 2 in.
572. Euphrasia sp. <sup>LISURICA</sup> Habitat as JCA 571 and associated  
WITH it ; pale violet, yellow-lipped ; 1-6 in.
573. Polygala sp. <sup>NICAENSIS</sup> Habitat as above ; lilac-pink ; 6 in.
574. Jasione sp.

**HELDREICHII**

574. Jasione ~~sp.~~ Habitat as JCA 571, etc. ; deep-blue flowers ; 3-9 in.
575. Bruckenthalia spiculifolia. Habitat as above (but extending upwards to about 7,500 ft.) - humus-filled pockets among boulders but elsewhere on west and north-facing slopes in open positions and in shade at margins of coniferous woodland ; rosy crimson flowers ; procumbent stems to 6 in.
576. Campanula ~~sp.~~ **PATULA** 6,000 ft., Pelister ; shady turfey bank ; violet flowers ; 10 in.
577. Cytisus sp. 6,000 ft., Pelister ; coniferous woodland ; shrubby clumps ; 1 ft.
578. Rosa sp. 6,000 ft., Pelister ; clumps of 2-4 ft stems rising among large boulders and on peaty stony banks ; hairy crimson hips.
579. ~~Papilionaceae~~ **LOTUS CORNICULATUS** 6,000 ft., Pelister ; turfey banks in coniferous woodland ; yellow ; 6 in.
580. Dianthus sp. Habitat as JCA 576 ; carmine ; 12-20 in.
581. Armeria ~~sp.~~ **VULGARIS** 6,000 ft., Pelister ; stony, west facing slope, open position ; pale pink ; 1 ft.
582. Knautia ~~sp.~~ **MAQUIEA** 6,000 ft. Pelister ; coniferous WOODLAND? AMONG GRASSES ; pale lavender ; 30 in.

17th August, 1964.

Pelister, Baba Mts.

583. Sedum sp. 6,100 ft., Pelister ; open position among stones in gravelly clay ; yellow ; 1-3 in.
584. Campanula ~~sp.~~ **PERSICIFOLIA** 6,100 ft., Pelister ; both in woodland and in open moorland among Vaccinium ; peaty soils ; wiry narrow-leaved stems carry two to four huge bright-blue bells ; 20-30 in.
585. ~~Compositae~~ **DOBONIKOWII** **AVUSTRIACUM** 6,200 ft., Pelister ; among rocks and debris at margins of and in stream ; great coarse, heart-shaped leaves, stems 3-5 ft. with yellow flower-heads in loose terminal corymb.
586. Caltha palustris ssp. laeta. Habitat as above ; growing in rocks in running water as well as at streamside ; 1-2 ft.
587. Petasites ~~sp.~~ **APENOSTYLES** **ORIENTALIS** Habitat as above ; among long grasses and lush herbage at margin of stream ; enormous leaves and stems to 5 ft. ; heads of purplish pink flowers.

588. Alchemilla sp. 6,200 ft., Pelister ; among grasses by stream ; ~~reddish~~ greenish ; 1 ft.
589. Alchemilla sp. 6,200 ft., Pelister ; among moss, creeping among wet stones ; greenish yellow flowers ; 2-4 in. ~~VAR. FLACEMOSA~~
590. Campanula rotundifolia ~~6,300~~ 6,300 ft., Pelister ; west-facing cliff in crevices ; blue ; 6-9 in.
591. Jasione ~~sp.~~ <sup>SUBINA</sup> 7,000-7,800 ft., Pelister ; peaty stony alpine turf and among Vaccinium ; close tufts of narrow leaves, heads of tiny bright deep-blue flowers with cream anthers ; 1-3 in.
592. Campanula ~~sp.~~ <sup>ROTUNDIFOLIA S.L.</sup> 6,700-7,900 ft., Pelister ; habitat as above and also in stable diorite scree - almost invariably among grasses ; wiry, quietly creeping root-stock sends up fine stems, sparsely clad in narrow leaves, ~~and rather~~ eventually rising to 4-9 in. among the grass and bearing enormous floppy flowers of clear lucid violet, up to 1½ in. across and either upward-facing or slightly drooping ; a lovely thing.
593. Verbascum ~~sp.~~ <sup>THAPSIFORME</sup> Altitude, locality, habitat as for JCA 591 ; rosettes of large, felted leaves ; dense spikes of clear-yellow flowers ; 30 in.
594. Geranium cinereum ssp. subcaulescens. Habitat as above ; variable ; magenta to carmine, 3-9 in.
595. Viola ~~sp.~~ <sup>ORPHANIS</sup> 7,800 ft., Pelister ; north-facing bank of gully sloping to west ; among grasses and Vaccinium in stony, peaty soil ; flowers of intense reddish violet splashed centrally with darkest purple and centred with cream ; 3 in. ; unfortunately specimens collected varied much in size of flower - from ½ in. in length to over 1 in. - it may only be a form of *V. saxatilis* but in its best forms certainly a beautiful thing
596. Genista ~~sp.~~ <sup>DEPRESSA</sup> 7,800 ft., Pelister ; turfy pockets among stones ; bright yellow ; prostrate stems.
597. Geum montanum. 7,700-7,900 ft., Pelister ; stony turf and grassy pockets among rocks.
598. Geranium ~~sp.~~ <sup>SILVATICUM</sup> 7,900 ft., Pelister ; among rocks in depressions on west-facing slope ; soft-green pilose leaves ; pale pink flowers ; 12-18 in.

599. Geum coccineum. Habitat as 598 - also in stony turf ; brilliant orange-scarlet ; 12-15 in.
600. Sempervivum octopodes. 7,000-8,100 ft., Pelister ; west-facing slope - both in peaty soil among grasses and rocks close to Vaccinium myrtillus and in rather peaty diorite and granite scree in open position ; ther may be two species here - the one from the former habitat being the typical S. octopodes with pale-green, purple-brown-tipped leaves ; the other being an altogether redder plant with more globular rosettes, more resembling a little S. ciliosum ; the difference in habitat is an obvious situation but I am not quite convinced ; both have quite large clear yellow flowers and send out rosettes on long stolons - sealing-wax-red in the latter.
601. Lilium carniolicum ssp. albanicum 8,000 - 8,200 ft., Pelister ; open vaccinium moorland in stony peat on west facing slope ; all plants were the single-flowered, high alpine form of this lovely yellow lily./ (see also J.C.A. 644) 9-12 in.
602. Sempervivum sp. 8,000 ft., Pelister ; habitat as for the former form of JCA 600 and associated with it ; dark-green rosettes, globular heads of tubular pale-yellow flowers ; 6 in.
603. Crocus ? veluchensis. 8,200 ft., Pelister ; habitat as for JCA 601 ; minute corms.
604. Knautia sp. <sup>MAGNIFICA</sup> 7,000-8,200 ft., Pelister ; more sheltered depressions on steep west-facing slope ; open vaccinium moorland ; lilac-pink ; 2-3 ft.
605. Polygonum sp. <sup>ALPIMUM</sup> 8,200 ft., Pelister ; open, west-facing slope in rough diorite and granite scree and boulder-slide ; pinkish white ; 12-18 in.
606. Linum ? elegans var. iberidifolium. 8,000-8,400 ft., Pelister ; very steep, west-facing slope in grass and vaccinium, gravelly, peaty soil ; buttercup-yellow flowers, 1½ in. across on 3-5 in. stems.
607. Gentiana lutea. 8,200 ft., Pelister ; single clump only located - gravelly soil on turfey 'promontory' projecting from the hillside ; yellow ; 30-40 in.

~~DORONICUM~~

608. Senecio sp. Habitat as for JCA 605 but 100 ft., higher (8,300 ft.) ; two clumps only seen - both in fairly stable but deep, coarse scree ; clumps of 9 in. stems clothed in grey-green, very succulent leaves ; bright gold flowers.
609. Ranunculus sp. 8,200 ft., Pelister ; turf, very steep west-facing slope - 10 in. yellow.
610. Senecio sp. ~~8,300-8,400 ft.~~ <sup>ABROTANIFOLIUS ssp. CARPATICUS</sup> Pelister ; extremely steep, west-facing slope among grasses ; orange-yellow, copper-backed ray florets ; dark-green dissected leaves (S. tyrolensis/abrotanifolius - type) ; stems first procumbent then 4-6 in. high.
611. Edicularis sp. ~~8,000-8,300 ft.~~ <sup>COMOSA</sup> Pelister ; AMONG grasses ; creamy-white flowers ; 6-8 in.
612. Stachys sp. ~~Altitude, locality, habitat as above ; grey-green leaves ; cream-coloured flowers, 8-13 in.~~ <sup>JACQUINII</sup>
613. ? Senecio sp. ~~Altitude, locality, habitat as above ; yellow ; 4-8 in. in height.~~ <sup>S. DAGO VIRGAUREA</sup>
614. Scorzonera ~~rosea~~ <sup>PURPUREA</sup> 8,300-8,400 ft., Pelister ; stony turf ; shell-pink ; 4-7 in.
615. Minuartia sp. ~~8,400 ft.~~ <sup>RECURVA</sup> Pelister ; pockets among granite boulders in stony peat ; white, 2 in.
616. Saxifraga ? cymosa. 8,400 ft., Pelister ; fissures in shady clefts of west-facing granite cliffs just below summit ; great, bright-green hummocks of caespitose rosettes of very soft, slightly hairy and sticky leaves ; in seed - no flowers - but, if it is S. cymosa, will have magnificent white flowers. Whatever, it is, it is certainly a most interesting 'Mossy' - probably the highest alpine on Pelister.
617. Helianthemum sp. ~~6,900 ft.~~ <sup>NUMMULARIA</sup> Pelister ; grassy bank near conifers ; lemon-yellow ; procumbent.
618. Viola sp. ~~8,800 ft.~~ <sup>ORPHANIDIS</sup> Pelister ; moist grassy bank shaded by conifers ; lower altitude of collection of JCA 595, (see this for description). laxer, leafier forms but a breathtakingly lovely sight when seen 'en masse', painting the bank intense violet.
619. Primula ? elatior ssp. intricata. 5,500-6,500 ft., Pelister ; open grassy slopes and in shade.

620. Campanula glomerata. 6,500 ft., Pelister, habitat as for JCA 619 ; deep violet ; 6-9 in.

18th August, 1964.

Pelister, Baba Mts.,  
Yugoslavian Macedonia

621. Euphorbia cyparissias. 3,200 ft., south of Nizepolje, east of Pelister ; sunny bank in stony clay ; greenish-yellow bracts ; 8 in.
622. Viola sp. Altitude, locality as above ; in turf - stony clay - among scrub ; mauve-blue ; 4 in.
623. Cruciferae. Habitat as above ; white ; 1 ft.
624. Helleborus ~~sp.~~ odoratus. 5,300 ft., Pelister ; in deep shade in mixed woodland ; 15 in.
625. ~~2~~ Anthemis sp. <sup>ORIENTALIS</sup> 5,000-6,100 ft., Pelister ; much-dissected silver leaves ; white 'daisies' ; 2-6 in. ; dryish banks of very stony clay.
626. Fritillaria sp. 5,300-5,400 ft., Pelister ; steep north-east facing slope in stony clay ; occasional plants dotted about at wide intervals - usually among grasses but frequently pushing up through prostrate mats of Juniperus ; 7-9 in. ; on schist.
627. Digitalis sp. <sup>VIRIDIFLORA</sup> 5,400 ft., Pelister ; among long grass at margin of woodland ; tubular creamy-yellow flowers ; 18-24 in.
628. Asphodelus sp. 5,400 ft., Pelister ; grassy slope in stony clay ; 4 ft.
629. Euphorbia cyparissias. 5,300 ft., Pelister ; very stony clay in light shade ; 1 ft.
630. Potentilla sp. <sup>RECTA</sup> 5,300 ft., Pelister ; steep slope among grasses ; lemon-gold flowers ; prostrate.
631. Lychnis sp. <sup>SILENE ARNERIA</sup> 5,300 ft., Pelister ; steep rocky slope facing east ; pale to deep rose-pink ; 8-14 in.
632. Campanula sp. <sup>PURPUREA</sup> Habitat as above - among stones ; thready annual with intense violet flowers, 2-5 in.
633. Viola sp. <sup>ORPHANDIS</sup> 5,300 ft., Pelister ; north-east facing slope, among grasses and in light shade ; 4-6 in.
634. Trifolium sp. <sup>ALPESICE</sup> Habitat as above - also in woodland ; rosy-red ; 6-8 in.
635. Sedum sp. <sup>TENUIFOLIUM</sup> Habitat as for JCA 631 ; yellow ; 7-9 in.

636. Satureia sp. Habitat as for 633 ; reddish-violet ; 6-8 in.
637. Rubus sp. Habitat as above ; stolons creeping among grasses in shade and sending up 10-20 in. stems bearing white flowers. pink
638. ~~Papilionaceae~~ <sup>CORONILLA VARIA</sup> Habitat as above ; lilac/flowers - beaked keel tipped reddish-purple ; 12-15 in.
639. Frunella vulgaris. Habitat as above - in shade ; violet-purple ; 4-9 in.
640. ~~Melittis~~ <sup>CALAMITINA GRANDIFLORA</sup> sp. 5,300 ft.; Pelister ; very wet position, with water percolating through it, in deep shade of woodland - creeping among debris of stones and leafmould ; rosy carmine ; 1-2 ft.
641. Campanula sp. ~~SPARSA~~ 5,000-6,000 ft., Pelister ; shady banks at margins of woodland - stony clay ; SHOWERS OF LITTLE violet flowers ; 2-3 ft.
642. Lychnis sp. ~~CORONARIA Habitat as above ; magenta-crimson, 2-3'~~

19th August, 1964.

Pelister, Baba Mts.,  
Yugoslavian Macedonia

643. Hypericum sp. ~~BARBATUM~~ 6,400 ft., Pelister ; west-facing slope - open position in gravelly clay ; yellow, 3-5
644. Lilium carniolicum ssp. albancicum. 6,500 ft., Pelister ; among long grasses on steep north-facing slope, in shade of coniferous woodland ; deep rich humusy soil ; 12-30 in.
645. Digitalis sp. 5,000 ft., Pelister ; open clearings in woodland on west-facing slope ; 4-5 ft.

20th August, 1964

Galicica Mts., Yugoslavian  
Macedonia.

646. Convolvulus ~~cantabricus~~ 4,000 ft., Galicica Mts. exposed, stony slope facing south-east ; gravelly clay between slabs of limestone ; pale-pink flowers striped rose ; 9-12 in.
647. Labiatae. Habitat as above ; 6 in. shrubby growth ; white flowers ; main constituent of vegetation.
648. Erodium sp. ~~GUICARDIC~~ Habitat as above ; dissected leaves of pure silver from woody root-stock ; brilliant magenta, crimson-veined flowers ; 9-12 in. stems.

649. Allium flavum. 4,000 ft., Galicica Mts. ; south-east-facing limestone cliff ; yellow ; 1 ft.
650. Dianthus sp. 5,500-5,800 ft., Galicica Mts. ; crevices and ledges on south-east and south-east facing limestone cliffs ; pale to deep pink, 4-8in.
651. Linum sp. 5,600 ft., Galicica Mts. ; stony clay pockets on limestone, south-east-facing slope ; fine-leaved wiry stems ; pale violet ; 9 in.
652. Muscari sp. Habitat as above ; 3-4 in.
653. Allium sp. <sup>CYPARIUM</sup> 5,600 ft., Galicica Mts. ; very stony clay over limestone on east-facing slope ; little fringed, pale-violet flowers - about a dozen drooping from 7-9 in. stems ; thready leaves.
654. HYSSOPUS OFFICINALIS sp. 5,600 ft., Galicica Mts. - habitat as for JCA 651 but in partial shade on north (655) side of beech-trees ; brilliant blue ; 1 ft.
656. Allium sp. 5,000-5,800 ft., Galicica Mts., sunny, dry places in pockets of gravelly clay on limestone and on ledges ; umbel of 6-20 open starry flowers of palest blush-pink - each perianth segment striped maroon-red ; one or two thready leaves ; wiry stems to 3-4 in. (Two most dainty, dwarf Alliums within a stone's throw of one another! - I cannot even guess as to their identity)
- 656.
655. Colchicum ? doerfleri. 5,800 ft., Galicica Mts. pockets filled with clay on limestone - corms deep.
657. Inula sp. <sup>OCULUS CHRISTI</sup> Habitat as for JCA 651; gold ; 7 in.
658. Campanulaceae. 5,800 ft., Galicica Mts.; fissures one east and west-facing limestone cliffs.;
659. Salvia / ringens. Habitat as for JCA 651 ; large violet-purple flowers ; 2 ft.
660. Sempervivum ciliosum form. 4,200 - 5,800 ft. ; Galicica Mts. ; ledges on east and west-facing limestone cliffs - also in limestone crevices on more level ground ; rather globular pale-green hairy rosettes - usually tinged scarlet ; yellow flowers ; 4-6 in.



661. Astragalus sp. 5,600 ft., Galicica Mts. ; clay in limestone crevices and among rocks - exposed south-facing positions ; grey, spiny 6in. hummocks.
662. Geranium reflexum. 5,700 ft., Galicica Mts. ; stony turf over clay ; partially shaded position ; lilac purple flowers - 6 in. much reduced form.
663. ? Ornithogalum sp. Habitat as above.
664. ~~7~~ Prunus prostrata. 5,800 ft. Galicica Mts. ; open undulating ('moorland' ; prostrate, woody hummocks among lumps of limestone bearing red-black 'cherries' ; did not seem quite the P. prostrata we met in the Atlas but I cannot see what else it can be!
665. Scilla autumnalis. Habitat as above.
666. Rosa sp. 5,600 ft., Galicica Mts. ; west-facing limestone cliff ; hairy scarlet hips ; 4-5 ft.
667. ~~20~~ Cotoneaster tomentosa. Habitat as above ; 5 ft.
668. Labiatae. ~~5,300 ft., Galicica Mts. ; ledges of gravelly clay on west-facing cliff ; pinkish-/3-4" -mauve flowers among tightly imbricated grey leaves!~~ ~~5,300 ft., Galicica Mts. ; ledges of gravelly clay on west-facing cliff ; pinkish-/3-4" -mauve flowers among tightly imbricated grey leaves!~~
669. Euphrasia sp. ~~ILLYRIACA~~ Habitat as above ; pale mauve ; 3in.
670. Echium sp. Habitat as above ; brick-red ; 6 in.
671. Labiatae. Habitat as above ; creamy yellow ; 2in.
672. Lilium martagon. 4,300 ft., Galicica Mts. ; among grasses in clay and leafmould ; shady position in beech-woods ; 2-4 ft.
673. Saxifraga sp. (Euaizoonia) 4,300 ft., Galicica Mts. ; crevices on limestone cliffs - shady.
674. Draba ~~ALZOPIC~~ 4,300 ft., Galicica Mts. ; west-facing limestone cliffs, in crevices ; loose hairy tufts.
675. Dictamnus albus var. macedonicus. 4,300 ft., Galicica Mts. ; stony clay over limestone partially shaded by neighbouring beeches ; 2 ft.
676. Sedum sp. ~~SARICOLANUM~~ ~~ssp. STICIBRNTI~~ Habitat as for JCA 674 ; yellow ; 3in.

22nd August, 1964.

Ohrid - Tetovo, Yugoslavian  
Macedonia.

677. Digitalis sp. 2,300 ft., Radika valley, north of Debar; steep, shaded limestone slopes and in woodland among scrub; cream, brown veined, 15-20"
678. Campanula sp. <sup>ALBA</sup> Habitat as above; blue-violet, 30 in.
679. Epilobium sp. <sup>DOJENAEI</sup> Altitude, locality as above; gravelly clay at base of limestone cliff; grey-green leaves; pale bluish pink flowers, 24-30 in.
680. Sempervivum heuffelii. 2,400 ft., Radika valley, north of Zirovnica; east-facing limestone cliff on broad, grassy ledges in stony clay.
681. Eupatorium sp. <sup>CANNAZINUM</sup> Altitude, locality as above; clumps in wet gravel and stream-borne debris around pool at base of waterfall; pinkish mauve, 3'
682. Echinops sp. <sup>AFF. RITRO</sup> Altitude, locality as above; among grasses on steep slope below limestone cliffs - in clay; royal-blue; 2 ft.
683. Melilotus sp. <sup>MEDICAGO SATIVA</sup> 3,300 ft., Radika gorge, east of Trnica; grassy, shaded bank in clay; vinous purple flowers; 15 in.
684. Aristolochia clematitis. Habitat as above; pale greenish yellow calyces; 18 in.
685. Echium sp. <sup>VULSARE</sup> Habitat as above; deep blue; 9-12 in.
686. Ramonda serbica. Altitude, locality as above; vertical north-facing limestone cliffs, in the perpetual shade of those on the opposite side of gorge; narrow ledges and crevices in shallow pockets of humus and clay among mosses - some of the numerous rosettes quite dried up and brown; other quite fresh but the dull-green leaves of them all covered in a thick greyish-white coating of the clay dust rising from the road below; seed had dispersed but plants collected.
687. Saxifraga sp. (media-type) Habitat as above.
688. Sempervivum heuffelii. Altitude, locality as above; shady position in turf on broad ledges - probably the same form as JCA 680 but seemed dwarfer.
- 688A. Draba sp. Habitat as above but dryish fissures.

689. Lilium martagon. Altitude, locality as above ; among grasses and in deep leafmould under scrubby beeches ; 2-3 ft. (collectings of L. martagon were made because there is a good chance of some of the fine, deeply coloured forms, native to the Balkans, appearing)
690. Anthemis ~~sp.~~ <sup>TRINCTORIA</sup>. Habitat as for JCA 683 - generally in rather moist places ; chrome yellow ; 20 in.
691. Dianthus sp. Habitat as for JCA 686 - usually in narrow fissures ; pale-pink ; 1ft.
692. Solidago virga-aurea. 3,800 ft., Mavrovo ; south-east-facing slope ; stony clay ; yellow ; 20-40 in

23rd August, 1964.

Popova Sapka, Sar Mts.,  
Yugoslavian Macedonia.

693. Dianthus ~~sp.~~ <sup>VISCOUS</sup>. 3,500 ft., west of Tetovo, Sar Planina ; among grasses in clearings in deciduous woodland ; carmine-crimson ; 15 in.
694. Salvia glutinosa. Habitat as above ; pale yellow flowers ; 15-36 in.
695. Linaria ~~sp.~~ <sup>CENISTIFOLIA</sup>. As above ; cream ; 9-20 in.
696. Campanula ~~sp.~~ <sup>RAPUNCULOIDES</sup>. As above ; violet-blue ; 12-20 in.
697. Centaureum ~~sp.~~ <sup>UMBELLATUM</sup>. As above ; bright pink ; 8-15 in.
698. Labiatae. As above ; pale mauve ; 18-24 in.
699. Euphorbia cyparissias. 5,600 ft., east of Popova Sapka ; south-east facing slope in dry stony clay and in turf ; 9 in. <sup>ALBANICA</sup>
700. Viola ? grisebachiana. 5,600-5,800 ft., Popova Sapka ; dry slope as above - in stony turf - also among grasses on south and east-facing slopes higher up ; mats or loose clumps of little, rounded slightly hairy leaves above which 1-2 in. stems rise to carry the comparatively large, rounded flowers of mauve-blue with yellow 'eyes' (If this is V. grisebachiana, as I think, it is a relative of V. calcarata and cenisia, so may need some care ; please note that it invariably frequented dry positions in the sun)
701. ? Galeopsis sp. 5,600 ft., Popova Sapka ; dry, sunny southern slope ; stony clay ; bright-pink, gold-dusted flowers ; 3-4 in.

702. Gentiana ~~bulgarica~~. 5,700 ft., Popova Sapka ;  
 NORTH)FACING BANK among grasses - moist peaty soil ;  
 clear pinkish mauve ; 2-3 in. (One of the most  
 beautiful alpiners I have seen - how very painful  
 that it is but an annual!)
703. Dianthus ? ~~myrtillifolius~~ <sup>DELTOIDES</sup>. Habitat as above ;  
 pale-green leaves ; sprays of little, bright-pink  
 flowers among the grass ; 3-4 in.
704. Saphne mzereum. 5,700-6,700 ft., Popova Sapka ;  
 north, east and west facing slopes among  
 Vaccinium myrtillus ; stony, peaty soil ; 1-2 ft.
705. Campanula rotundifolia ~~?~~ var. racemosa. 5,700 ft.,  
 Popova Sapka ; truffy pockets among granite  
 boulders ; violet blue ; 1 ft.
706. Dryas octopetalá. 5,700-5,800 ft., Popova Sapka ;  
 extensive mats in turf clearing among vaccinium  
 and in turf among granite boulders ; stony peaty  
 soil ; prostrate.
707. Crocus ? veluchensis. 5,700 ft., Popova Sapka ;  
 north-facing slope among vaccinium ; stony peat.
708. Sedum ~~sp.~~ <sup>ALBUM FORM</sup>. 5,700 - 6,500 ft., Popova Sapka ; dryish  
 places among granite boulders and on ledges ;  
 massed cluster of softest blush-pink flowers ;  
 3-6 in ; stems and leaves frequently translucent  
 coral-red. ; (It is not often that I enthuse over  
 a Sedum but this is a beautiful plant - it may be  
 an excellent form of S. album)
709. Parnassia palustris. 5,700 ft., Popova Sapka ;  
 moist turf banks in proximity of stream ; 3-6 in.
710. Gentiana ~~velutina~~ <sup>SILVATA</sup>. 5,700 ft. Popova Sapka ; habitat  
 as above and also as JCA 702 and 703 ; dusky  
 almost slaty-blue flower - rather pleasant form, 4 in.
711. Salix ? ~~?~~ <sup>ALPINA</sup>. 5,700 ft., Popova Sapka ; in  
 truffy crevices among granite boulders at stream-  
 side ; dark decumbent stems ; silvery catkins.
712. Saxifraga ? aizoides. 5,700 ft., Popova Sapka ;  
 among wet granite boulders in stream ; massive  
 cushions - glossy green leaves ; greenish-yellow  
 flowers, orange-yellow anthers ; 6 in.
713. Chrysanthemum ~~sp.~~ <sup>LEUCANTHEMUM VULGARE SSP. MONTANUM</sup>. 5,700 ft., Popova Sapka ; moist  
 loamy soil among grasses ; white ; 1-2 ft.

- PUSILLA**
714. Silene sp. Habitat as for JCA 712 - perhaps not quite such wet places ; bright-green cushions ; pale pink or white ; 6 in.
715. Alchemilla sp. 5,700 ft., Popova Sapka ; ~~MOIST~~ east-facing bank among grasses ; greenish-yellow flowers ; 1 ft. - 15 in.
716. Carlina sp. 5,700 ft., Popova Sapka ; east-facing slope in turf ; ivory bracts ; 4 in.
717. Scabiosa sp. 5,700-5,900 ft., Popova Sapka ; habitat as above and also in open 'moorland' conditions, in stony peat among vaccinium ; felted leaves ; pink ; 6-10 in.
718. Sedum sp. 5,800 ft., Popova Sapka ; east-facing SLOPE ; dryish, rather shady positions in crevices ; glaucous leaves, pinkish white ; 1 in.
719. Geranium reflexum. 5,700 ft., Popova Sapka ; among granite boulders ; lilac ; 18 in.
720. ? Anthyllis sp. 5,700 ft., Popova Sapka ; grassy crevices on south-east facing slope ; bright-yellow ; 6 in. - 12 in.
721. Allium sp. 5,700 - 5,800 ft., Popova Sapka ; slightly moist places on east and north-facing slopes among grasses ; umbels of pendant violet-mauve flowers ; 3-6 in. ('A. pulchellum-type').
722. Jasione sp. Habitat as for JCA 717 ; blue ; 1 ft.
723. Geranium cinereum ssp. subcaulescens. Habitat as above ; carmine-magenta ; as variable as always.
724. Euphrasia sp. 5,800 ft., Popova Sapka ; turf patches among vaccinium ; blue-mauve ; 2-5 in.
725. Veratrum album. 5,800 ft., Popova Sapka ; EAST-facing bank among grasses ; 4-5 ft.

24th August, 1964

Pasina Glava, Sar Mts.,  
Yugoslavian Macedonia

726. Geum montanum. 6,600 ft., Pasina Glava ; open moorland in stony, peaty turf ; 1 in.
727. Dianthus sp. 6,700 ft., Pasina Glava ; east-facing marble cliffs - in crevices and ledges ; pale-pink ; 6 in.

728. Sempervivum ? heuffelii. 6,700 ft., marble cliffs - on east-facing ledges ; also on east-facing slope among grass and in one area forming a 'turf' itself of very closely packed rosettes (there was no trace of flowers on the latter colony and its occurrence was probably due to the heavy upland grazing - the goats and sheep finding the spiny rosettes unpalatable) ; yellow ; 8-12 in.
729. Sedum ~~sp.~~ <sup>ACRE</sup>. 6,700 ft., Pasina Glava ; dryish crevices in marble cliffs ; golden-yellow ; 2-3 in.
730. Iris reichenbachii. 6,800 ft., Pasina Glava ; broad ledges on marble cliff, among long grasses and in stony clay - open, east-facing position.
731. Linum ~~sp.~~ <sup>SPATHULATUM</sup>. Habitat as above ; from a woody stock rise numerous basal shoots clad in soft, bluish green leaves and one to six leafy stems, from 3 to 18 in. in length, branching to carry racemes of large flowers, up to 1½ in. across, of the most intense and purest imperial violet ; 4-12 in. (I hesitate to dwell too enthusiastically over any of our collections, lest the species fails to live up to our expectations of it and our subscribers fall upon us proclaiming us liars ; we can but say that we were more excited over this plant than over any other we found.)
732. Saxifraga aizoon ? var. orientalis. 6,800 ft., Pasina Glava ; east and west facing crevices and ledges on marble cliffs.
733. Saxifraga sp. (porophylla-type - possibly the one known as 'frederici-augustii'). Habitat as above.
734. Saxifraga ? oppositifolia var. meridionalis. Habitat as above ; the tightest of silvery hummocks in vertical crevices - usually under slight overhang - I am not at all sure that it is not a Kabschia!!
735. Stachys sp. Habitat as above (732, etc.) - usually on dryish, gravelly ledges ; bright rosy crimson, 1-3"
736. Centaurea ~~sp.~~ <sup>AXILLARIS</sup>. Habitat as for JCA 730 ; sterile florets royal-blue, fertile florets crimson ; 8-15 in.

- ALPINA**
737. Scutellaria ~~sp.~~ <sup>ALPINA</sup> Habitat as for JCA 730, 731, etc. ; among grasses ; decumbent stems clad in slightly hairy, soft-green leaves rise from 2-8 ins. to carry the close racemes of rather large flowers from amid pale-green, purple-tinted bracts ; deep purple-violet hoods and wavy-edged lips of palest violet ; creeping habit ; (A bit on the leafy-side but the flowers are very good!)
738. Labiatae. 6,700 ft., Pasina Glava ; dryish gravelly slope ; pale yellow, brown markings, 3-8 in.
739. Campanula glomerata ✓ 6,600-6,800 ft., Pasina Glava ; stony turf ; violet-purple ; 2 - 18 in.
740. Helianthemum ~~sp.~~ <sup>NUMMULARIA s.l.</sup> Habitat as above ; bright golden yellow, orange centre ; 2-3 in.
741. Oxytropis ~~sp.~~ <sup>ONOBRYCHIS MONTANA var. SCARDICA</sup> Habitat as above ; stems prostrate or rising from 1 to 6 in. ; bright carmine pink.
742. Euphrasia ~~sp.~~ <sup>LIBORNICA</sup> Habitat as above ; yellow ; 2-4 in.
743. Euphrasia ~~sp.~~ <sup>ILYCEIA</sup> Habitat as above ; mauve-pink ; 2-4 in.
744. Geranium ~~reflexum~~. 6,700 ft., Pasina Glava ; north-east facing gully in boulder-strewn turf ; 18 in
745. Primula ? elatior ssp. intricata. Habitat as above - also in 'moorland' turf ; 6-8 in.
746. Gagea ~~sp.~~ Habitat as for JCA 730, 731, etc. ; 3-4"
747. Lilium carniolicum ssp. albanicum. Habitat as above.
748. Satureia (Calamintha) ~~sp.~~ Habitat as JCA 738 - usually among boulders ; red-violet ; 4 in.
749. Campanula ~~sp.~~ 6,800 ft., Pasina Glava ; stony turf ; erect, thready, 1-3 stems carrying violet flowers, 1 in. across.
750. Campanula ~~sp.~~ 6,800 ft., Pasina Glava ; habitat AS for JCA 727 ; erect spikes of many, small pale-blue, starry flowers ; 3-12 in.
751. Scutellaria ~~sp.~~ <sup>ERIGERON ACER</sup> 6,600 ft., Pasina Glava ; stony turf ; 3-4 in. ; pinkish lilac.
752. Silene ~~sp.~~ <sup>CILIATA</sup> 6,600 ft., Pasina Glava ; among rocks ; pink flowers ; striped calyx ; 8 in.
753. Galium ~~sp.~~ <sup>VERUM</sup> 5,700 ft., Popová Sapka ; moist place among boulders, with grasses ; yellow ; 18-24 in.
754. Hypericum ~~sp.~~ <sup>PERFORATUM</sup> 5,700 ft., Popova Sapka ; east-facing, grassy bank ; golden-yellow ; 10-12 in.

755. Arabis alpina ssp. flavescens. 5,700-6,700 ft.  
Popova Sapka/Pasina Glava ; among rocks - higher  
up in turfy crevices ; cream, yellow 'eye' ; 6in.
- 755A. Hutchinsia ? brevicaulis. 6,700 ft., Pasina Glava ;  
turfy pockets among rocks ; 2-3 in.  
(N.B. We regret that there was some confusion  
over these two collections - all seed is almost  
certainly of the Arabis, however)
756. Gentiana ~~verna~~. 5,700 ft., Popova Sapka ; moist  
turfy banks ; seed collection only but probably  
the same form as JCA 7Io.

757.

25th August, 1964.      Pasina Glava, Sar Mts.,  
Yugoslavian Macedonia.

757. Picea abies (vulgaris). 6,000 ft., Pasina Glava ;  
north-facing slope.
758. Orchidaceae. 6,000 ft., Pasina Glava ; in moist  
peaty turf among vaccinium ; 3-4 in.
759. Geum montanum. 7,400 ft., Pasina Glava ; open  
'moorland' conditions - in turf ; golden yellow ;  
almost stemless ; 1 in.
760. Crocus ? scardicus. 7,500-7,800 ft., Pasina Glava ;  
high-alpine grassland and vaccinium moorland on  
south-east-facing slope ; stony, leached soil -  
slightly peaty and certainly acid ; the plant  
invariably occurred in or rather around wide  
depressions, which obviously harboured the last  
of the snow-patches ; at 7,800 ft. I found it  
profuse in a wide depression among tussocks of  
grass in peaty conditions. (I can find no record  
of C. scardicus in cultivation - it is a beautiful  
species with yellow flowers with violet throats ;  
while I cannot be certain that this collecting is  
of C. scardicus (it could only be C. veluchensis  
otherwise) I am fairly certain. The corms were  
small and obviously seed is the method of increase  
- those trying to grow this should forget that it  
is a Crocus and treat it as any difficult high-  
alpine,;keeping it on the dry side in winter - very  
wet around May (it flowers in August/July in  
Macedonia)- and moist in summer.)



ALPINUM SSP. LANATUM

761. ~~Cerastium~~ <sup>ALPINUM</sup> sp. 7, 600 ft., Habitat as 760 but generally in dry places ; mounds of tightly imbricated, very woolly foliage ; 3 in.
762. ~~Achillea~~ <sup>ATRATA</sup> sp. 7,000 ft., Pasina Glava ; dryish, gravelly ledges ; white ; 4-9 in.
763. ~~Cerastium~~ sp. Habitat as above ; white ; 3 in.
764. ~~Sedum~~ <sup>ALPINUM</sup> sp. Habitat as above ; yellow ;  $\frac{1}{2}$  in.
765. ~~Alsine~~ <sup>VERNA</sup> sp. (Mindartia). As above ; tight, emerald-green cushions ; white ; 2 in.
766. ~~Erigeron~~ <sup>ALPINUS</sup> sp. 6,000 ft., Pasina Glava ; turfey crevices ; pinkish liac ;  $2\frac{1}{2}$  in.
767. Pinguicula ? vulgaris. 5,700 ft., Popova Sapka ; moist turf by stream-side.
- 768A. ~~Viola ? grisea~~ <sup>ALBANICA</sup> ~~boehiana~~. 7,500 ft., Pasina Glava ; stony turf on south-facing slope ; mauve-blue ; 1-2 in. ; (higher alpine form of JCA 700)
768. ORCHIS MACULATA 18"

25th August, 1964.

Treska Gorge, west of  
Skopje, Yugoslavian Macedonia.

769. Sempervivum heuffelii. 1,000 ft., Treska Gorge ; broad ledge on limestone cliff among grasses in dry, gravelly clay ; 1 ft.
770. Ramonda nathaliae. 1,000 ft., Treska Gorge ; vertical, north-facing limestone cliffs, heavily shaded by adjacent trees ; among moss on narrow ledges and in crevices but almost always growing in a mat of moss, clinging, in apparent defiance of gravity to shallow depressions on the sheer cliff face ; the whole about 1 in. deep and completely dried out, the brown, shrivelled and very fragile rosettes embedded in the dehydrated moss. - apparently quite lifeless!! The moss and Ramondas hung in great curtains over this one, rather out-of-the-way, cliff and must have been a wonderful sight when in flower. It will, of course, be quite unnecessary to dry out the plants in summer, in cultivation - I merely mention this to emphasise that these Gesneriads - Ramonda, Haberlea and Jankaea - are really adapted to extremely dry summer conditions. - not sunny ones as most plants but very shady ones.

COLLECTIONS OF WHICH WERE OF DRIED SPECIMENS ONLY

302 ; 303 ; 304 ; 305 ; 310 ; 317 ; 319 ; 320 ;  
322 ; 323 ; 324 ; 325 ; 327 ; 328 ; 330 ; 331 ;  
333 ; 334 ; 335 ; 337 ; 338 ; 339 ; 340 ; 342 ;  
343 ; 346 ; 347 ; 348 ; 349 ; 350 ; 351 ; 352 ;  
353 ; 354 ; 355 ; 356 ; 357 ; 359 ; 365 ; 368 ;  
369 ; 370 ; 371 ; 372 ; 373 ; 375 ; 376 ; 377 ;  
378 ; 381 ; 382 ; 386 ; 387 ; 389 ; 390 ; 396 ;  
397 ; 398 ; 399 ; 400 ; 401 ; 402 ; 406 ; 408 ;  
413 ; 414 ; 418 ; 419 ; 420 ; 429 ; 430 ; 431 ;  
432 ; 433 ; 434 ; 436 ; 437 ; 438 ; 439 ; 440 ;  
441 ; 442 ; 444 ; 445 ; 450 ; 451 ; 452 ; 456 ;  
457 ; 458 ; 460 ; 462 ; 463 ; 464 ; 465 ; 466 ;  
468 ; 469 ; 480 ; 481 ; 482 ; 484 ; 485 ; 486 ;  
487 ; 489 ; 494 ; 497 ; 501 ; 502 ; 506 ; 509 ;  
510 ; 526 ; 527 ; 529 ; 531 ; 532 ; 533 ; 535 ;  
542 ; 543 ; 544 ; 547 ; 548 ; 549 ; 551 ; 552 ;  
554 ; 555 ; 556 ; 557 ; 559 ; 560 ; 562 ; 570 ;  
571 ; 572 ; 573 ; 574 ; 576 ; 579 ; 580 ; 581 ;  
582 ; 583 ; 584 ; 585 ; 587 ; 588 ; 590 ; 596 ;  
599 ; 604 ; 605 ; 608 ; 612 ; 613 ; 614 ; 617 ;  
622 ; 623 ; 624 ; 630 ; 632 ; 634 ; 635 ; 636 ;  
637 ; 638 ; 639 ; 641 ; 642 ; 643 ; 645 ; 646 ;  
647 ; 648 ; 654 ; 657 ; 662 ; 668 ; 669 ; 670 ;  
671 ; 676 ; 678 ; 679 ; 681 ; 682 ; 683 ; 684 ;  
685 ; 690 ; 691 ; 692 ; 693 ; 694 ; 695 ; 696 ;  
697 ; 698 ; 701 ; 702 ; 705 ; 709 ; 711 ; 712 ;  
713 ; 714 ; 715 ; 716 ; 718 ; 720 ; 722 ; 723 ;  
724 ; 729 ; 735 ; 739 ; 741 ; 742 ; 743 ; 748 ;  
751 ; 752 ; 753 ; 754 ; 757 ; 762 ; 763 ; 766 .

N.B. The above numbers refer to collections of herbarium material alone ; dried specimens were of course collected of the majority of the remaining collections (a list of collections of seeds and/or bulbs or living material has already been sent to subscribers). Nevertheless, I shall be ~~be grateful of details of any flowering~~ glad to learn of the flowering of any collection.