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## **A floristic report from Mount Erimanthos (NW-Peloponnisos, Greece)**

### **Abstract**

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A list of 117 vascular taxa new to Mount Erimanthos (NW Peloponnisos, Greece) is presented, based on recent field work. Notes on collection localities and species habitats are provided. 6 taxa are Balkan endemics and 6 Greek endemics. 7 taxa are new to Peloponnisos and one is characterized as Rare.

### **Introduction**

This paper deals with 117 new reports for the vascular flora of Mt Erimanthos and is complementary to Maroulis & Artelari (2001) in which 473 taxa new to this mountain are presented. All the above taxa are included in a PhD Thesis, concerning the flora and vegetation of Erimanthos, which was carried out the first author (Maroulis 2003) at the Botanical Institute of Patras University.

Information on the geology and the topography of Mt Erimanthos is given in Maroulis & Artelari (2001). The topographic map of the study area is presented in Fig. 1.

References to the flora of Erimanthos are found in Halácsy (1900-1904, 1908, 1912), Barbero & Quezel (1976), Strid (1986), Strid & Tan (1991, 1997, 2002), Tan & Iatrou (2001) and Maroulis & Artelari (2001). Scan floristic data are also to be found in other sources unrelated to the flora of the mountain.

### **Material and methods**

The study is based on collections, field observations carried out by the first author during the years 1997–2002, as well as on herbarium material of the Botanical Museum of Patras University (UPA). The collected specimens are deposited in UPA.

The nomenclature follows Strid & Tan (1997, 2002), Greuter & al. (1984 – 1989), Strid (1986), Strid & Tan (1991), and Tutin & al. (1968 – 1980, 1993). The sequence of families, genera and species in the plant list is alphabetical.

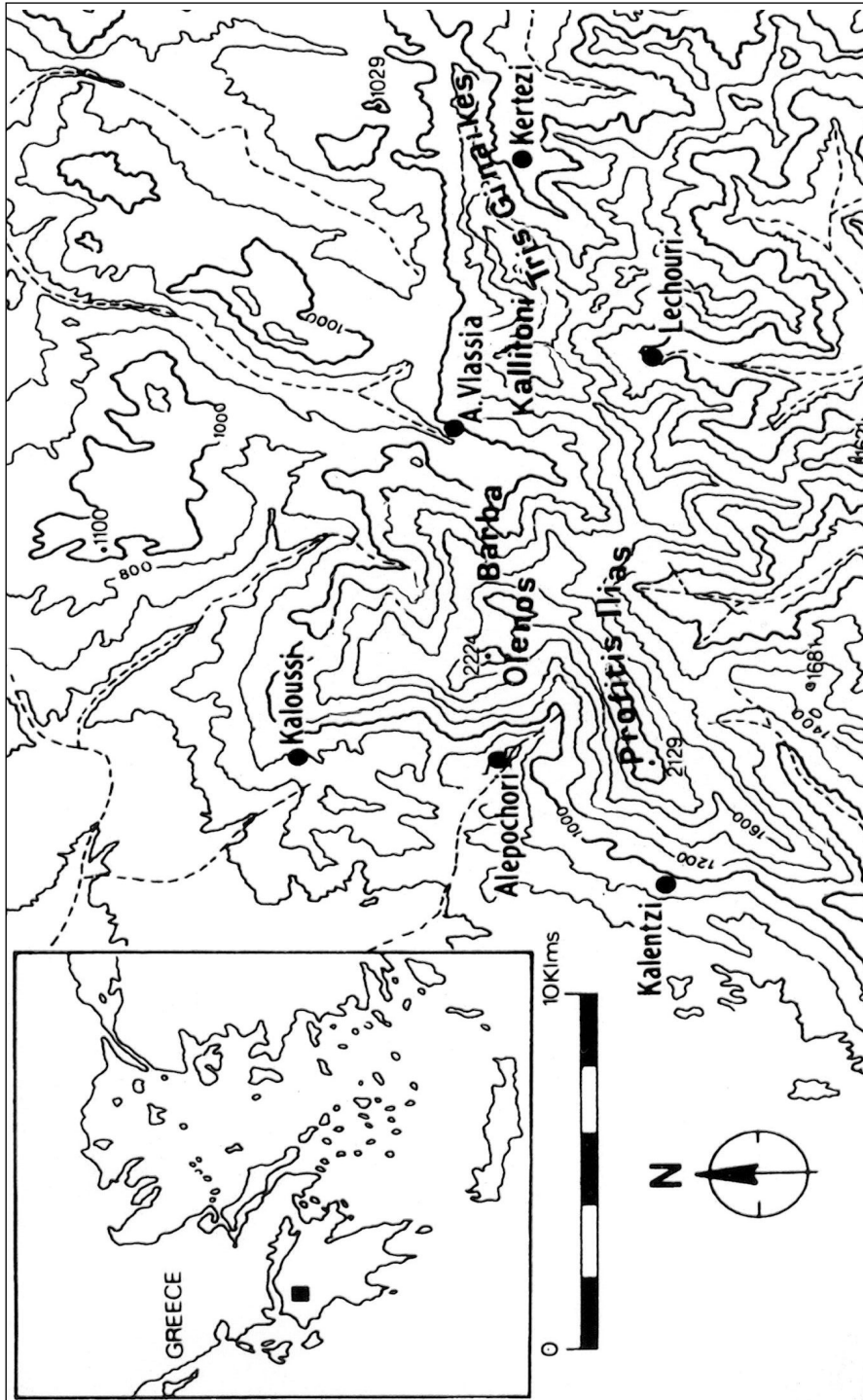


Fig. 1. Topographic map of Mt. Erimanthos.

**Floristic list**

Abbreviations and symbols used:

obs. = observation only, no herbarium specimens collected

! = herbarium specimens kept in UPA examined

\* = Greek endemic taxon

# = taxon reported for the first time from Peloponnisos

GM= G. Maroulis

## PTERIDOPHYTA

*POLYPODIACEAE*

*Asplenium ruta-muraria* L. - H ros, Circumbor. -N exposition of summit Kallifoni, crevices of limestone rocks, alt. 1700 m, 27/5/02 (GM 1400).

*Cystopteris fragilis* (L.) Bernh. - H caesp, Cosmop. -N exposition of summit Kallifoni, limestone rocks, alt. 1750 m, 11/6/02 (GM 1266).

*Polypodium cambricum* L. - H ros, Circumbor. -W of village Kalentzi, forest of *Quercus ilex* and *Quercus coccifera*, flysch, alt. 670 m (GM obs.). «Montes Erymanthos, supra pagum Lakkomata, in silva Abietis». Alt. ca 950 m, 20/5/68 (Phitos 8598, UPA!).

## DICOTYLEDONES

*APIACEAE*

*Angelica sylvestris* L. - H scap, Eurosibir. -N exposition of summit Tris Ginaikes, forest of *Abies cephalonica*, alt. 1400 m, 2/5/01 (GM 1487).

*Elaeoselinum asclepium* (L.) Bertol. subsp. *asclepium* - H scap, NE-Stenomedit. -S of village Kaloussi, W slopes of summit Melissovouini, low scrub with *Quercus coccifera*, alt. 900 m, 8/7/02 (GM 2546).

*Geocaryum capillifolium* (Guss.) Cosson - G bulb, Balkan-It. -E slopes of summit Rachi Gerakari, relict stands with *Quercus pubescens*, alt. 900 m, 14/3/02 (GM 303).

*Malabaila aurea* (Sm.) Boiss. - H bienn, Balkan.-anat. -Summit Agios Konstantinos, S of village Livartzi. Forest with *Carpinus orientalis*, *Fraxinus ornus* and other deciduous trees, N exposition, alt. 1100 m, 29/4/02 (GM 2778). The examined specimen differs from the typical ones in the presence of 3-4 bracts.

*Myrrhoides nodosa* (L.) Cannon - T scap, Stenomedit. -Forest with *Platanus orientalis* in

- Piros river, W of village Kobigadi, alt. 650 m, 10/5/98 (GM 743). Forest with *Platanus orientalis* in village Kertezi, alt. 820 m, 3/6/02 (GM 825).
- Peucedanum longifolium* Waldst. & Kit. - H scap, Balkan -N slopes of summit Tris Ginaikes, limestone rocks and rocky places, alt. 1400 m, 17/5/02 (GM 812).
- P. vittijugum* Boiss. - H scap, Balkan -Vlasia region, roadsides, *Abies* forest, fields, *Platanus orientalis* forest, alt. 800 – 1200 m, 14/7/02 (GM 2890).
- Sanicula europaea* L. - H scap, Eurosibir. -*Castanea sativa* forest in village Kertezi, alt. 830 m, 3/6/02 (GM 801).
- Scaligeria napiformis* (Sprengel) Grande - H scap, E-Medit. -W of village Alepochori, *Pinus halepensis* forest, flysch, alt. 500 m, 12/4/02 (GM 2799).
- Scandix australis* subsp. *grandiflora* (L.) Thell. - T scap, Stenomedit. -S of village Kaloussi, W slopes of summit Melissovouni, in communities of *Phlomis fruticosa* and *Ballota acetabulosa*, alt. 1000 m, 17/6/98 (GM 2638).
- #*Seseli peucedanoides* (Bieb.) Kos. - H scap, Medit.-mont. -Pol. - Summit Kallifoni, rocky meadows and rock bases, E exposition, alt. 1800 – 1900 m, 11/6/02 (GM 1403, 1404).
- Tordylium officinale* L. - T scap, NE-Medit. -«N foothills, by the summer resort of Tsapournia. Opening in *Abies* woodland». Alt. 950 – 1000 m, 20/7/92 (Strid 33473, UPA!).

#### ARISTOLOCHIACEAE

- Aristolochia rotunda* L. - G bulb, Eurimedit. -Village Livartzi region, *Platanus orientalis* forest, alt. 850 m, 7/6/99 (GM 1550).

#### ASTERACEAE

- Achillea ligustica* All. - H scap, W-Medit. -N of village Lechouri, *Abies* forest, alt. 1200 m, radiolarite, 8/6/99 (GM 1711).
- Aetheorhiza bulbosa* (L.) Cass. subsp. *bulbosa* - G bulb, Stenomedit. -W of village Alepochori, *Pinus halepensis* forest, flysch, alt. 500 m, 12/4/02 (GM 1712).
- Cirsium italicum* (Savi) DC. - H bienn, SE-Europ. -Roadsides E of village Drossia, alt. 900 m, 10/8/96 (GM 2607, 2656)
- Hieracium crinitum* Sibth. & Sm. - H scap, SE-Europ. -Kertezi region, forest of *Castanea sativa*, alt. 870 m, 3/6/02 (GM 822, 1043), alt. 850 m, 8/9/02 (GM 259).
- Inula oculus-christii* L. - H scap, SE-Europ.-pont. -Summit Melissovouni, degraded communities with *Astragalus creticus* and *Marrubium cylleneum*, alt. 1550 m (GM 656).
- Leontodon hispidus* L. subsp. *hispidus* - H ros, Europ.-caucas. -N slopes of summit Barba, rocky meadows with *Astragalus* spp., alt. 1800 m, 25/6/97, (GM 1452).
- Pulicaria odora* (L.) Rchb. - H scap, Eurimedit. -W of village Erimanthia, macchie with *Quercus coccifera*, *Arbutus unedo*, etc., flysch, alt. 450 m (GM obs.).
- Sonchus asper* (L.) Hill subsp. *asper* - T scap, Eurasiat. -Banks of river Tethreas, near Agios Dimitrios, roadsides and fields, alt. 450 m, 12/4/02 (GM 706).
- Tephrosia integrifolia* L. (Holub) subsp. *integrifolia* - H ros, Circumbor.-Arctic.-alp. -N slopes of summit Tris Ginaikes, rocky places in *Abies* timberline, alt. 1450 m, 17/5/02 (GM 839).
- Xeranthemum inapertum* (L.) Miller - T scap, S-Europ.-pont. -S of village Livartzi, summit Agios Konstantinos, phrygana with *Phlomis fruticosa*, alt. 1100 m, 7/6/99 (GM

930). Summit Kallifoni, E exposition, rocky meadows with *Eryngium amethystinum*, alt. 1700 m (GM 1305).

#### BORAGINACEAE

\**Alkanna methanaea* Hausskn. - H scap, Endem. -S of village Livartzi, meadows near a stream, alt. 850 m, 7/6/99 (GM 921). Roadsides in village Kertezi, alt. 900 m, 1/6/97 (GM 1169). By a trail in summit Tris Ginaikes, alt. 1500 m, 3/6/02 (GM 1551).

*Lithospermum purpureocaeruleum* L. - H scap, S-Europ.-pont. -Village Livartzi, stands with *Platanus orientalis*, alt. 850 m, 7/6/99 (GM 1546).

*Myosotis arvensis* (L.) Hill - T scap, Euro.-W.asiat. -«Montes Erymanthos, in declivibus borealibus cacuminis Kentrias». Alt. 1450 m, 27/6/67 (Phitos 7068, UPA!).

#### CAMPANULACEAE

#*Campanula glomerata* L. - H scap, Eurasiat. -N slopes of Kallifoni, meadows, alt. 1700 m, 11/6/02 (GM 1401).

#### CARYOPHYLLACEAE

*Dianthus monadelphus* subsp. *pallens* (Sm.) Greuter & Burdet - H scap, Balkan-anat. -S of village Kaloussi, W slopes of summit Melissovouni, low scrub with *Quercus coccifera*, alt. 1000 m, 8/7/02, (GM 2659).

*Minuartia globulosa* (Labill) Schinz & Thell. - T scap, E-Stenomedit. -W slopes of Melissovouni, screes and low, sparse scrub with *Quercus coccifera*, alt. 900 m, 17/6/98 (GM 387).

*M. hamata* (Hausskn. & Bornm.) Mattf. - T scap, Medit.-mont. -Summit Kallifoni, E exposition, bases of limestone rocks, alt. 1900 m, 11/6/02 (GM 1414).

*Scleranthus annus* L. - T scap, Paleotemp. -Small plateau of summit Tris Ginaikes, meadows in E exposition, alt. 1500 m, 2/6/01 (GM 389).

\*#*Silene niederi* Boiss. - H scap, Endem. -Michas region, low scrub with *Quercus coccifera*, alt. 1000 m (GM obs.).

*S. tenuiflora* Guss. - T scap, NE-Medit. -NE slopes of summit Tris Ginaikes, small plateau, alt. 1450 m, 2/6/97 (GM 2564).

*S. viridiflora* L. - H ros, S-Europ.-C-asiat. -*Castanea sativa* forest in village Kertezi, alt. 850 m, 3/6/02 (GM 1327). S of village Vlasia, river Selinoudas valley, *Platanus orientalis* stands, alt. 900 m (GM obs.).

#### CISTACEAE

*Helianthemum salicifolium* (L.) Miller - T scap, Eurimedit. -Lechouri region, phrygana with *Phlomis fruticosa*, alt. 1000 m, 10/5/99 (GM 304).

*Tuberaria guttata* (L.) Fourr. - T scap, Eurimedit. -W of village Alepochori, near Agios Dimitrios, *Pinus halepensis* forest, flysch, alt. 500 m, 12/4/02 (GM 1774).

#### CONVOLVULACEAE

*Convolvulus cantabrica* L. - H scap, Eurimedit. -N of village Livartzi, phrygana with *Phlomis fruticosa*, alt. 900 m, 7/6/99 (GM 1490). SE of village Lechouri, phrygana with *Phlomis fruticosa*, alt. 1000 m, 10/5/99 (GM 1500).

*Cuscuta approximata* Bab. subsp. *approximata* - T par, Paleosubtrop. -«Montes Erymanthos, in Abietis, in agris». Alt. ca 1050 m, 24/6/68 (Phitos 8373 & 8372, UPA!).

*C. palaestina* Boiss. - T par, SE-Medit. -SE of village Lechouri, phrygana with *Phlomis fruticosa*, alt. 900 m, 7/6/99 (GM 1495).

#### CRASSULACEAE

*Sedum caespitosum* (Cav.) DC. - T scap, Eurimedit. -Meadows near Agios Dimitrios, alt. 450 m, 12/4/02 (GM 2000).

*S. dasyphyllum* L. - Ch succ, Eurimedit. -N exposition of summit Kallifoni, limestone rocks, alt. 1800 m, 11/6/02 (GM 2688).

#### CRUCIFERAE

*Draba muralis* L. - T scap, Circumbor. -Kallifoni, rocky meadows with *Stipa pennata*, E exposition, alt. 1700 m, 10/6/02 (GM 737). Hills W of village Alepochori, phrygana with *Phlomis fruticosa* and open rocky places, alt. 600 m, 12/4/02 (GM 2683).

#### GERANIACEAE

*Erodium malacoides* (L.) L'Her - T scap, Medit.-macarones. -Village Kaloussi, roadsides and edges of phrygana formations with *Genista acanthoclada*, alt. 700 m, 10/5/98 (GM 2681).

*Geranium asphodeloides* subsp. *asphodeloides* Burm. f. - H scap, S-Europ.-pont. -Rachi Gerakari, relict forest with *Quercus pubescens*, alt. 900 m, 13/4/02 (GM 2023).

#### GUTTIFERAE

#*Hypericum rumeliacum* subsp. *apollinis* (Boiss. & Heldr.) Robson & Strid - H scap, Balkan. -Summit Kallifoni, W exposition, rocky meadows with *Stipa pennata*, *Marrubium cylleneum* etc., alt. 1700 m, 25/5/02 (GM 730).

#### LAMIACEAE

*Acinos rotundifolius* Pers. - T scap, NE-Medit. -Lechouri region, phrygana with *Phlomis fruticosa*, alt. 1000 m, 10/5/99 (GM 355). Livartzi region, phrygana with *Phlomis fruticosa*, alt. 950 m, 7/6/99 (GM 967).

*A. suaveolens* (Sm.) Loudon - Ch suffr, NE-Medit. -«N part, SW of summer resort of Tsapournia. Damp ravine and shady rocks in *Abies* forest». Alt. 1300 - 1350 m, 22/7/92 (Strid 33565, UPA!).

*Scutellaria columnae* All. - H scap, NE-Medit.-mont. -Stand with *Castanea* trees in village Vlasia, alt. 1000 m, 1/6/99 (GM 519). Village Bouboukas, in yards, alt. 800 m, 2/6/01 (GM 871).

*Sideritis purpurea* Bentham - T scap, Balkan -Livartzi region, abandoned field and phrygana with *Phlomis fruticosa*, alt. 900 - 1100 m, 8/6/99 (GM 932). Lechouri region, phrygana with *Phlomis fruticosa*, alt. 900 m, 8/6/99 (GM 315).

#### LEGUMINOSAE

*Astragalus glycyphylloides* DC - H rept, Eurosibir. -N slopes of summit Tris Ginaikes,

- Abies* forest, alt. 1250 m, 17/5/02 (GM 814).
- Laburnum anagyroides* Medicus - P caesp, S-Europ. -Stand with *Castanea sativa* in village Vlasia, alt. 850 m, 30/6/97 (GM 2561).
- Lathyrus niger* (L.) Bernh. - G rhiz, Europ.-caucas. -NW of village Vlasia, *Quercus frainetto* forest, alt. 800 m, 5/5/97 (GM 432). Village Kertezi, *Castanea sativa* forest, alt. 830 m, 1/6/97 (GM 920).
- Lotus conimbricensis* Brot. - T scap, Stenomedit. -W of village Greveno, meadows, alt. 650 m, 13/4/02 (GM 2044).
- L. glaber* Miller - H scap, Paleotemp. -«Montes Erymanthos, supra pagum Tsapournia, in Abietis», alt. 1000 m, 24/6/68 (Phitos 8366, UPA!).
- L. tetragonolobus* L. - T scap, stenomedit. -N of village Platanitsa, meadows, alt. 1000 m, 12/6/99 (GM 633).
- Lupinus albus* L. subsp. *graecus* (Boiss. & Spruner) Franco & Pinto da Silva - T scap, Balkan-anat. -NW of village Vlasia, clearings of *Quercus frainetto* forest, alt. 700 m, 5/5/97 (GM 1576).
- Medicago arabica* (L.) Hudson - T scap, Eurimedit. -S of village Michas, meadows, alt. 1200 m, 24/6/97 (GM 2047).
- M. coronata* (L.) Bart. - T scap, Eurimedit. -Kallifoni, N exposition, *Abies* forest, alt. 1300 m, 10/5/99 (GM 2045).
- M. minima* (L.) Bartal. - T scap. Paleotemp. -Village Lechouri region, phrygana with *Phlomis fruticosa*, alt. 1000 m, 10/5/99 (GM 1574).
- Trifolium ochroleucon* Hudson - H caesp, Eurimedit.-pont. -N of village Vlasia, *Quercus frainetto* forest, alt. 750 m, 1/6/99 (GM 823). S of village Bouboukas, deciduous forest, alt. 800 m, 17/5/02 (GM 1589).
- T. patulum* Tausch - H caesp, NE-Medit.-mont. -N of village Vlasia, *Quercus frainetto* forest, alt. 800 m, 1/6/99 (GM 821). S of village Bouboukas, deciduous forest, alt. 850 m, 17/5/02 (GM 1588).
- T. phleoides* Pourret - T scap, Stenomedit.-pont. -S of village Bouboukas, meadows in clearings of *Quercus frainetto* forest, alt. 850 m, 17/5/02 (GM 1579).
- Trigonella monspeliaca* L. - T scap, Eurimedit. -Village Livartzi region, phrygana with *Phlomis fruticosa*, alt. 1000 m, 7/6/99 (GM 618).
- Vicia bithynica* (L.) L. - T scap, Eurimedit. -Village Lechouri region, phrygana with *Phlomis fruticosa*, alt. 1000 m, 10/5/99 (GM 1587).
- V. parviflora* Cav. - T scap, Eurimedit. -W of village Alepochori, clearings of *Quercus coccifera* macchie, alt. 500 m, 12/4/02 (GM 740).
- V. pubescens* (DC) Link - T scap, Eurimedit. -SW of village Greveno, edges of scrub with *Quercus coccifera*, *Erica arborea* and *Arbutus unedo*, alt. 450 m, 13/4/02 (GM 2673).
- #*V. serinica* Uechtr. & Huter - H scap, S-Balkan-It. -Summit Kallifoni, N exposition, meadows, alt. 1700 m, 11/6/02 (GM 1411).

#### LINACEAE

- Linum bienne* Miller - H scap, Eurimedit. -Lechouri region, phrygana with *Phlomis fruticosa*, alt. 900 m, 10/5/99 (GM 992).
- L. pubescens* Banks & Solander - T scap, Balkan -W of village Greveno, sparse scrub with *Quercus coccifera* and *Quercus pubescens*, flysch, alt. 550 m, 13/4/02 (GM 2055).

*MALVACEAE*

*Althaea hirsuta* L. - T scap, Eurimedit. -Village Lechouri region, phrygana with *Phlomis fruticosa*, alt. 1000 m, 10/5/99 (GM 1493). Village Livartzi region, phrygana with *Phlomis fruticosa*, alt. 900 m, 7/6/99 (GM 1496).

#*Lavatera thuringiaca* subsp. *ambigua* (DC) Nyman - H scap, Balkan-It. -N slopes of summit Tris Ginaikes, sparse *Abies cephalonica* forest and *Abies* forest road sides, alt. 1200 m, 14/7/02 (GM 2912).

*ONAGRACEAE*

*Epilobium lanceolatum* Sebastiani & Mauri - H scap, W-Europ. -W of village Kertezi, *Abies* forest, ascending to the summit Tris Ginaikes, south exposition, alt. 1000 m, 1/6/97 (GM 974). Summit Tris Ginaikes, N exposition, *Abies* forest, alt. 1250 m, 17/5/02 (GM 2537). SE of village Lakkomata, *Abies* forest, alt. 1200 m, 25/5/99 (GM 2539).

*PLANTAGINACEAE*

*Plantago afra* L. - T scap, Eurimedit. -W of village Alepochori, phrygana with *Phlomis fruticosa* and meadows, alt. 600 m, 12/4/02 (GM 707).

*P. bellardii* All. subsp. *bellardii* - T scap, S-Medit. -W of village Alepochori, phrygana with *Phlomis fruticosa*, alt. 600 m, 12/4/02 (GM 703).

*P. coronopus* L. subsp. *coronopus* - T scap, Eurimedit. -W of village Alepochori, meadows and roadsides, alt. 600 m, 12/4/02 (GM 704).

*PLUMBAGINACEAE*

*Armeria undulata* (Bory & Chaub.) Boiss. - H ros, NE-Medit. -Tris Ginaikes, N exposition, *Abies* forest clearings, alt. 1400 m, 17/5/02 (GM 1055).

*RANUNCULACEAE*

\**Delphinium hellenicum* Pawl. - T scap, Endem. -E of village Kertezi, field edges, alt. 800 m, 14/7/02 (GM 2922).

*Ranunculus gracilis* Clarke - H scap, NE-Medit. -«N side, by forest road SE of the village Kato Vlasia. Openings in *Abies cephalonica* forest». Alt. 1000 – 1100 m, 21/5/89 (Strid 29629, UPA!).

*RHAMNACEAE*

*Rhamnus alaternus* L. subsp. *alaternus* - P caesp, Stenomedit. -W of village Kalentzi, forest with *Quercus ilex* and *Q. coccifera*, alt. 700 m, 13/4/02 (GM 2336).

*R. lycioides* subsp. *graeus* (Boiss. & Reuter) Tutin - P caesp, E-Medit. -W slopes of summit Neravidovouni, low shrub with *Quercus coccifera* and *Phlomis fruticosa*, alt. 700 – 1000 m, 17/6/98 (GM 2330).

*ROSACEAE*

*S. torminalis* (L.) Crantz - P caesp, Paleotemp. -Agion Pandon Monastery, forest with *Quercus coccifera*, *Q. pubescens* and *Ostrya carpinifolia*, alt. 600 m (GM obs.). Only two small shrubs.



## RUBIACEAE

*Galium intricatum* Margot & Reuter - T scap, Balkan -Village Lechouri region, phrygana with *Phlomis fruticosa*, alt. 1000 m, 10/5/99 (GM 1573).

*G. odoratum* (L.) Scop. - G rhiz, Eurasiat. -*Castanea sativa* forest in village Kertezi, alt. 850 m, 3/6/02 (GM 804).

## SANTALACEAE

*Thesium parnassi* DC. - H scap, Orof.SE-Europ. -Summit Kallifoni, N exposition, rocky meadows, alt. 1700 m, 11/6/02 (GM 733).

## SCROPHULARIACEAE

*Linaria pelisseriana* (L.) Miller - T scap, Medit.-atl. -W of village Alepochori, *Pinus halepensis* forest, flysch, alt. 500 m, 12/4/02 (GM 1030).

\**Rhinanthus pubescens* (Sterneck) Sóo - T scap, Endem. -Summit Kallifoni, N exposition, bases of limestone rocks, alt. 1700 m, 11/6/02 (GM 1402).

## VALERIANACEAE

*Valerianella coronata* (L.) DC. - T scap, Eurimedit. -E slopes of summit Kallifoni, open rocky places with sparse individuals of *Juniperus oxycedrus*, *Crataegus orientalis* etc., alt. 1600 m, 11/6/02 (GM 2507).

## MONOCOTYLEDONES

## CYPERACEAE

*Carex distans* L. - H caesp, Eurimedit. -«Mons Erymanthos, supra pagum Kalentzi», alt. 700 m, 1/5/80 (Phitos & Kamari 19200, UPA!). «By stream, 5 km NW of Kato Vlasia, N of Erimanthos». 20/6/75 (Polunin & Chater 13156, UPA!).

*C. divisa* Hudson - G rhiz, Eurimedit.-atl. -«In altoplanitie ad orientem cacuminis Olonos, ca 1550 m, in humidis». 27/6/68 (Phitos 8566, UPA!).

*C. divulsa* Stokes - H caesp, Eurimedit. -Valley of river Selinoudas, S of village Vlasia, forest with *Platanus orientalis*, alt. 900 m, 14/7/02 (GM 2896).

*C. remota* L. - H caesp, Europ.-caucas. -Valley of river Selinoudas, S of village Vlasia, forest with *Platanus orientalis*, alt. 900 m, 14/7/02 (GM 2894).

*Schoenus nigricans* L. - H caesp, Subcosmop. -Summit Kallifoni, S exposition, spring, in *Abies* forest clearings, alt. 1450 m, 11/6/02 (GM 2562).

## LILIACEAE

*Allium roseum* L. -G bulb, Stenomedit. - W of village Alepochori, meadows, alt. 500 m, 12/4/02 (GM 2282).

\*#*Fritillaria thessala* (Boiss.) Kamari subsp. *thessala* - G bulb, Endem. -N exposition of summit Tris Ginaikes, shady rock bases, in *Abies* timberline, alt. 1350 m, 13/5/02 (GM 811). Cultivation F 248, UPA. This is the first report of the taxon from Peloponnisos, but according to G. Kamari (pers. com.) it also grows on the mountains Chelmos and

## Oligirtos.

*Ornithogalum gussonii* Ten. - G bulb, Stenomedit. -N slopes of summit Tris Ginaikes, open rocky places in *Abies* forest edges, alt. 1450 m, 17/5/02 (GM 818). Summit Barba, N exposition, grassy meadows, alt. 1700 m, 20/6/02 (GM 1284).

## ORCHIDACEAE

*Aceras anthropophorum* (L.) W.T. Aiton - G bulb, Medit.-atl. -Near village Agios Dimitrios, sparse *Pinus halepensis* forest and phrygana, alt. 450 m, 12/4/02 (GM 701).

*Barlia robertiana* (Loisel) Greuter - G bulb, Stenomedit. -W of village Erimanthia, macchie clearings, alt. 500 m, 1/4/02 (GM 700).

*Himantoglossum hircinum* (L.) Sprengel - G bulb, Medit.-atl. -S of village Kaloussi, W slopes of summit Melissovouini, stand with *Crataegus heldreichii* and *C. monogyna*, alt. 900 m, 10/5/98 (GM 991). Only two individuals found.

*Neotinea maculata* (Desfontaines) Stearn - G bulb, Eurimedit. -Near the road from Lechouri to Vlasia, *Abies* forest, alt. 1450 m, 10/5/99 (GM 1741).

\**Ophrys argolica* Fleischm. - G bulb, Endem. -W of village Alepochori, phrygana with *Phlomis fruticosa*, flysch, alt. 550 m (GM 1751).

*O. reincholdii* Spruner ex Fleischm. - G bulb, E-Medit. -W of village Alepochori, phrygana with *Phlomis fruticosa*, flysch, alt. 700 m, 12/4/02 (GM 1745).

*O. sphegodes* Miller subsp. *sphegodes* - G bulb, Eurimedit. -W of village Greveno, sparse scrub by a spring, flysch, alt. 650 m, 13/4/97 (GM 1569).

*Orchis lactea* Poir. - G bulb, Stenomedit.- Summit Rachi Gerakari, meadows and *Phlomis fruticosa* phrygana, alt. 900 m, 14/3/02 (GM 1510).

*O. mascula* L. - G bulb, Europ.-caucas. -S slopes of summit Kallifoni, near the road from Lechouri to Vlasia, *Abies* forest, alt. 1450 m, 10/5/99, (GM 2861).

*O. papilionacea* L. - G bulb, Eurimedit. -Agios Dimitrios region, stand with *Cupressus sempervirens*, alt. 450 m, 12/4/02 (GM 1568).

*Platanthera bifolia* (L.) Rchb. - G bulb, Paleotemp. -*Castanea sativa* forest in village Kertezi, alt. 850 m, 3/6/02 (GM 800).

*Serapias bergonii* E.G. Camus - G bulb, E-Medit. -W of village Alepochori, sparse *Pinus halepensis* forest and roadsides, flysch, alt. 550 m, 12/4/02 (GM 1507).

## GRAMINEAE

*Anthoxanthum gracile* Biv. - T scap, Stenomedit. -Summit Rachi Gerakari, W exposition, phrygana with *Phlomis fruticosa*, alt. 800 m, 14/3/02 (GM 1499).

*Brachypodium pinnatum* (L.) P.Beauv. - H caesp, Paleotemp. -S of village Bouboukas, *Quercus frainetto* forest, alt. 1000 m, 5/6/02 (GM 2268).

*Bromus riparius* Rehman - H caesp, Eurymed.-orient. -Summit Kallifoni, W exposition, communities with *Festuca cyllenica*, alt. 1800 m, 11/6/02 (GM 1290).

*Cynosurus cristatus* L. - H caesp, Europ.-caucas. -Summit Rachi Gerakari, meadows, alt. 900 m, 14/3/02 (GM 2216).

*Helictotrichon aetolicum* (Rech. f.) Holub - H caesp, Balkan. -Summit Barba, E exposition, communities with *Festuca cyllenica*, alt. 1900 m, 20/6/02 (GM 1251). Summit Kallifoni, W exposition, rocky meadows, alt. 1800 m, 11/6/02 (GM 1290).

*Secale montanum* Guss. - H caesp, Medit.-mont. -Summit Kallifoni, E exposition, com-

munities with *Marrubium cylleneum* and *Eryngium amethystinum*, alt. 1700 m, 11/6/02 (GM 1291).

*Vulpia ciliata* - T caesp, Eurimedit. -«Meadow, 5 km NW of Kato Vlasia. N of Erimanthos». 20/6/75 (Polunin & Chater 13153, UPA!).

## Results

From the 117 new floristic reports from Mt. Erimanthos, 6 are Greek endemics (marked by an asterisk in the list), 6 Balkan endemics and 8 Balkan subendemics, distributed in Balkan Peninsula and Italy or Anatolia.

From the Greek endemics, *Alkanna methanaea*, *Delphinium hellenicum* and *Ophrys argolica* are restricted to S Greece; *Silene niederi* is a new record for Peloponnisos and has on Erimanthos the southernmost point of its distribution; *Fritillaria thessala* subsp. *thessala* is new record for Peloponnisos too and according to G. Kamari (pers. com.) occurs also on Chelmos and Oligirtos.

*Seseli peucedanoides*, *Campanula glomerata*, *Silene niederi*, *Hypericum rumeliacum* subsp. *apollinis*, *Vicia serinica* and *Lavatera thuringiaca* subsp. *ambigua* are also new records for Peloponnisos and reach on Erimanthos the southernmost point of their distribution in Greece.

The following taxa have a restricted distribution in Peloponnisos occurring besides Erimanthos, on one or two more mountains: *Galium odoratum*, *Helictotrichon aetolicum* and *Secale montanum* occur also on Chelmos, *Silene viridiflora* on Parnon, *Peucedanum longifolium* on Chelmos and Oligirtos, *Rhinanthus pubescens* on Chelmos and Killini, and *Tephrosieris integrifolia* subsp. *integrifolia* on Chelmos and Taigetos.

*Ophrys argolica* is included in the Red Data Book of Rare and Threatened plants of Greece (Phitos & al. 1995) characterized as Vulnerable and *Silene niederi* in the IUCN Red List of Threatened Plants (Walter & Gillett 1998) characterized as Rare. Both taxa are represented in the study area by few, small populations.

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