

# Floristic notes for the plateau of Dervenochoria and Mts Parnitha, Pastra and Kitheronas (nomos Viotias, Sterea Ellas, Central Greece)

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Received: February 03, 2020 ▷ Accepted: February 28, 2020

**Abstract.** Floristic information for the botanically unexplored plateau of Dervenochoria in nomos Viotias (Sterea Ellas, Central Greece) is presented. This includes distributional data for 148 species and subspecies of vascular plants. Two species are reported as new to mainland Greece, 7 for the floristic region Sterea Ellas, 31 for nomos Viotias and 32 for eparchia Thivon. New records are also provided for the mountains Parnitha (11 taxa), Pastra (22 taxa) and Kitheronas (5 taxa) which partly lie in nomos Viotias.

**Key words:** flora, Greece, new records, Sterea Ellas, wetland and semi-wetland habitats

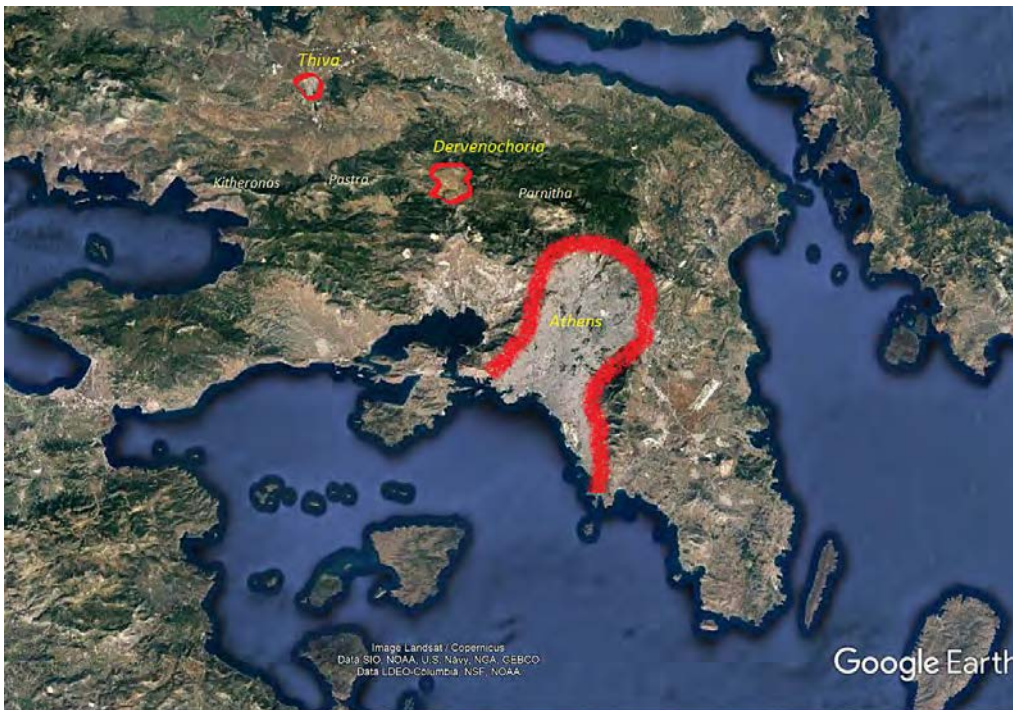
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## Introduction

The plateau of Dervenochoria, otherwise known as the “plateau of Skourta”, is located in nomos Viotias and eparchia Thivon which belong to the Greek floristic region Sterea Ellas (StE). It lies between the mountains Parnitha and Pastra at altitudes of 530 to 560 m, covering an area of c. 40 km<sup>2</sup> (Fig. 1). Five villages are situated around the plateau – Skourta in the north, Pili and Panakto to the west, Prasino to the southwest and Stefani in the south. The five are collectively known as “Dervenochoria” and together with the village of Daphnoula, comprise the former homonymous municipality of Dervenochoria. Two main roads traverse the area, the first in a southeasterly direction connecting Pili with Athens, the second from south to north connecting the villages of Stefani and Skourta. The plateau is surrounded by limestone slopes covered with open *Pinus halepensis* forest and *Quercus coccifera* scrub. Flat land with a few *Pyrus spinosa* shrubs occur at the margins of the area. Within the plateau, scattered

trees of *Quercus ithaburensis* subsp. *macrolepis* appear, and thickets of *Prunus spinosa* and *Rosa* spp. are not uncommon along roads and field margins. Most of the plateau comprises fallow fields, cereal fields and vineyards. Surrounded by low mountains, the plateau gathers large amounts of winter rain, resulting in numerous vernal pools, seasonally flooded flats, semi-wetland and ditches, all of which provide a multitude of habitats for plant communities with interesting taxa (Fig. 2).

Systematic botanical research in Greece has a relatively short history and thus several parts of the country still remain botanically ignored. The flora of Viotia is in general, underexplored and there are areas which have hardly been botanized at all. In the *Flora Hellenica* database only 13,266 records exist for nomos Viotias as compared to 28,871 for neighbouring Attiki. We were attracted to this area for the reasons stated above and also because the surrounding low mountains have a relatively untouched nature with much floristic interest.



**Fig. 1.** Map showing position of study area in Viotia.



**Fig. 2.** Vernal pool on the plateau of Dervenochoria.

Viotia comprises two former eparchies, Levadias and Thivon and the plateau of Dervenochoria is situated in the latter. Although not far distant from the large cities of Athens and Thiva (Thebes), the plateau has not been explored by botanists or at least we have no information on their collections. There are a considerable number of taxa in the area considered rare in the sense that nomos Viotias is one of their few known localities. It

is therefore likely that a botanical study of unexplored fragments of the area would provide interesting data. Our aim is to fill a gap in our floristic knowledge and provide data which could be used by others to designate the site as worthy of protection.

Floristic checklists from eparchia Thivon are indeed few. They include a study on Mt Elikonas (Kokmotos & Georgiadis 2005) and the Aliki area (Constantinidis

2004). The greatest contribution of plant material from eparchia Thivon is from Willing and Willing (material deposited in Berlin herbarium). In contrast, the mountains Parnitha, Pastra and Kitheronas have been fairly well botanized (Aplada & al. 2007, Constantinidis 1997). Nevertheless, new records were noted from these mountains which partly lie in nomos Viotias. The geographical borders of the prefectures (nomi) of Viotia and Attiki are delimited by the northwest side of Mt Parnitha, eastern and northern slopes of Mt Pastra and the northern foothills of Mt Kitheronas.

## Material and methods

The study is based on collections and field observations carried out from 2016 to 2019. The study area is indicated in a map from Google Earth (Fig. 1). Most of the voucher specimens are deposited in ATH (Goulandris Natural History Museum), with a small number kept in ATHU (National and Kapodistrian University of Athens). Families and species are listed in alphabetical order within the major taxonomic groups, mainly following Euro+Med PlantBase (2006+) with a few cases deviating to follow the nomenclature adopted in the *Flora Hellenica* database (indicated by synonyms). The records characterized as new to Viotia or eparchia Thivon have not been reported in published literature nor contradicted by herbarium material registered for the *Flora Hellenica* database.

## Results and discussion

### PTERIDOPHYTA

#### *Isoetaceae*

##### *Isoetes haussknechtii* Troia & Greuter

Plateau of Dervenochoria, 2.2 km NE of village Prasino, vernal pool in cereal fields, clay, 535 m, 38°11'N, 23°32'E, 22.04.2018, *Polymenakos* 501 (ATH); *loc. ibid.*, 01.06.2019, *Polymenakos* & *Pantavos* 834 (ATH).

New for nomos Viotias and the floristic region of Sterea Ellas. A single population of this rare plant was found on the plateau. Its biotope is a vernal pool which in early April is dominated by *Ranunculus peltatus* subsp. *peltatus*. The leaves of *Isoetes haussknechtii* are then already visible, emerging from the water (Fig. 14). Some rare taxa such as *Montia arvensis* and *Myosotis*

*sicula* occur at the muddy edges of the pool and when the latter dries out, the mud is covered with *Ranunculus lateriflorus*, *R. ophioglossifolius*, *Juncus pygmaeus*, *J. tenageia*, *J. minutulus* and *Verbena supina*.

Although treated as a distinct species by Troia and Greuter (2015) *I. haussknechtii* may possibly represent the terrestrial or amphibious form of the aquatic *I. heldreichii* Wettst. which was reported from the same locality but never found again and presumed 'extinct' by Troia and Greuter (2015).

##### *Isoetes histrix* Bory (Fig. 3)

Plateau of Dervenochoria, 2.6 km SW of Skourta, seasonally flooded uncultivated field, clay, 535 m, 38°11'N, 23°31'E, 22.04.2018, *Polymenakos* 502 (ATH); *loc. ibid.*, 01.06.2019, *Polymenakos* & *Pantavos* 835 (ATH).

New for nomos Viotias.



Fig. 3. *Isoetes histrix*.

### SPERMATOPHYTA – ANGIOSPERMAE

#### *Alismataceae*

##### *Alisma lanceolatum* With. (Fig. 4)

Mt Pastra, 2.2 km WSW of Dafni, damp base of seasonally dry artificial depression, limestone, 415 m, 38°14'N, 23°23'E, 28.05.2017, *Polymenakos* 247 (ATHU); plateau of Dervenochoria, 2.2 km NE of village Prasino, seasonal pool in cultivated fields, clay, 535 m, 38°11'N, 23°32'E, 03.04.2018, *Polymenakos* 556 (ATH).

New for Mt Pastra and nomos Viotias. Occurring in vast quantities in ditches and seasonal pools on the plateau of Dervenochoria.



Fig. 4. *Alisma lanceolatum*.

### Alliaceae

#### *Allium cyrilli* Ten.

Plateau of Dervenochoria, 2.5 km NE of village Stefani, cereal field, clay, 560 m, 38°11'N, 23°34'E, 19.05.2019, *Polymenakos & Koutsogiannopoulos* 815 (ATH).

Confirming an old report from eparchia Thivon (Halácsy 1904: 261) based on a collection by Spruner.

#### *Allium dentiferum* Webb & Berthel.

Plateau of Dervenochoria, 2 km SE of Pili, edge of cereal field, clay, 535 m, 38°12'N, 23°31'E, 02.07.2019, *Polymenakos* 877 (ATH).

New for nomos Viotias.

#### *Allium scorodoprasum* subsp. *rotundum* (L.) Stearn (syn. *Allium rotundum* L.)

Plateau of Dervenochoria, 2.7 km SE of Pili, in vineyards, clay, 530 m, 38°12'N, 23°31'E, 19.05.2019, *Polymenakos & Koutsogiannopoulos* 816 (ATH).

New for eparchia Thivon, reported from eparchia Levadias (Kokmotos & Georgiadis 2005).

#### *Allium vineale* L.

Plateau of Dervenochoria, 2 km SE of Pili, damp margins of cereal field, clay, 535 m, 38°12'N, 23°31'E, 12.06.2018, *Polymenakos* 617 (ATH).

New for eparchia Thivon, reported from eparchia Levadias (Mts Parnassos, Elikonas).

### Amaranthaceae

#### *Amaranthus graecizans* L.

Plateau of Dervenochoria, 2.1 km SE of Pili, vineyards, clay, 530 m, 38°12'N, 23°31'E, 30.08.2019, *Polymenakos* 930 (ATH).

Reported from eparchia Thivon. Common on the plateau together with *A. retroflexus*.

#### *Amaranthus retroflexus* L.

Plateau of Dervenochoria, 2.1 km SE of Pili, vineyards, clay, 530 m, 38°12'N, 23°31'E, 30.08.2019, *Polymenakos* 929 (ATH).

Reported from eparchia Thivon.

### Apiaceae

#### *Bifora testiculata* (L.) Spreng.

Plateau of Dervenochoria, 1 km SE of Pili, cereal fields, clay, 530 m, 38°12'N, 23°30'E, 16.04.2019, *Polymenakos* 750 (ATH); Mt Parnitha, "Mazareika", E of Skourta, fallow fields, limestone, 440 m, 38°13'N, 23°37'E, 01.05.2019, *Polymenakos & Pantavos* 792 (ATH).

New for Mt Parnitha, there are numerous records from cereal fields in nomos Viotias.

#### *Bupleurum tenuissimum* L.

Plateau of Dervenochoria, 2.2 km NE of village Prasino, muddy spot close to dried-out seasonal pool, clay, 535 m, 38°11'N, 23°32'E, 10.11.2018, *Polymenakos* 658 (ATH).

New for nomos Viotias, rare on plateau. Only once reported from floristic region of Sterea Ellas (nomos Etolias-Akarnanias, left side of Aheloos river in Mesolongi, *Stamatiadou* 13908, ATH, C).

***Conium maculatum* L.**

Mt Pastra, in village Panakton, ruderal places and roadsides, limestone, 575 m, 38°11'N, 23°29'E, 16.04.2016, *Polymenakos* 82 (ATHU).

New for Mt Pastra.

***Ridolfia segetum* (Guss.) Moris**

Plateau of Dervenochoria, 1.8 km ESE of Pili, fallow fields, clay, 530 m, 38°12'N, 23°30'E, 15.06.2019, *Polymenakos* 862 (ATH).

New for eparchia Thivon. Not uncommon on the plateau and the surrounding areas of Viotia and west Attiki. Rarely collected due to its late flowering and mistaken for wild or cultivated forms of *Foeniculum vulgare* Mill.

***Scandix australis* L. subsp. *australis***

Mt Pastra, 3.5 km W of Pili, stony slope with few *Quercus coccifera* shrubs, limestone, 750 m, 38°12'N, 23°27'E, 26.04.2019, *Polymenakos* 773 (ATH).

New for Mt Pastra. Another subspecies, *S. australis* subsp. *grandiflora* (L.) Thell. has been collected from Mts Parnitha, Pateras, Pendeli and Pastra.

**Asteraceae**

***Anthemis arvensis* subsp. *incrassata* (Loisel.) Nyman**  
Plateau of Dervenochoria, 2.6 km SW of Skourta, seasonally flooded flat, clay, 535 m, 38°11'N, 23°31'E, 12.05.2018, *Polymenakos* 558 (ATH).

Common on plateau, in cereal and fallow fields, vineyards. Very few records from nomos Viotias have been identified to subspecies rank.

***Anthemis palaestina* (Kotschy) Boiss.**

Plateau of Dervenochoria, 2.35 km S of Skourta, edge of cereal field, clay, 535 m, 38°11'N, 23°33'E, 14.10.2019, *Polymenakos* 945 (ATH, det. K. Goula); *loc. ibid.*, 25.01.2020, fruits collected, *Polymenakos* (herb. Kit).

New for nomos Viotias, Sterea Ellas and mainland Greece. *Anthemis palaestina* was plentiful in the single locality on the plateau and collected in fruit together with the related *A. altissima* L. Fruiting heads of *A. palaestina* have been collected from nomos Arkadias (village of Vlacherna in foothills of Menalo, roadside, 870 m, 37°43'N, 22°14'E, 29.07.2018), this constitutes the first record for the Peloponnese. The taxon is un-

dercollected as it is not easily recognized in flowering state but unmistakable in fruit.

***Carduus acicularis* Bertol.**

Plateau of Dervenochoria, 2.5 km SW of Skourta, damp fallow field, clay, 535 m, 38°12'N, 23°31'E, 30.04.2018, *Polymenakos* & *Koutsogiannopoulos* 531 (ATH); Mt Kitheronas, 2 km NE of Platees, damp uncultivated field, clay, 335 m, 38°13'N, 23°17'E, 30.04.2018, *Polymenakos* & *Koutsogiannopoulos* 521 (ATH).

New for Mt Kitheronas and eparchia Thivon, apparently undercollected in Viotia due to its resemblance to the widespread *Carduus pycnocephalus*.

***Carthamus lanatus* subsp. *baeticus* (Boiss. & Reuter) Nyman**

Plateau of Dervenochoria, 1.3 km ESE of Pili, roadsides and field margins, clay, 530 m, 38°12'N, 23°30'E, 02.07.2019, *Polymenakos* 870 (ATH).

Recorded from eparchia Thivon.

***Centaurea cyanus* L.**

Plateau of Dervenochoria, 2.2 km NE of Prasino, seasonally flooded fallow field, clay, 535 m, 38°11'N, 23°32'E, 01.06.19, *Polymenakos* & *Pantavos* 832 (ATH).

New for eparchia Thivon.

***Cirsium arvense* (L.) Scop.**

Mt Kitheronas, 2.8 km W of Erythres, on road to Platees, wet ground at the edge of cultivated field, clay, 340 m, 38°13'N, 23°17'E, 05.07.2017, *Polymenakos* 318 (ATHU).

New for Mt Kitheronas.

***Cirsium italicum* DC.**

Plateau of Dervenochoria, SW of Skourta, vineyards and fallow fields, clay, 530 m, 38°12'N, 23°32'E, 02.07.2019, *Polymenakos* 874 (ATH).

New for eparchia Thivon.

***Crepis pulchra* L.**

2 km NE of Platees, in damp uncultivated field, clay, 335 m, 38°13'N, 23°17'E, 30.04.2018, *Polymenakos* & *Koutsogiannopoulos* 519 (ATH).

New for nomos Viotias.

***Echinops microcephalus* Sm.**

Plateau of Dervenochoria, 2.2 km NE of Stefani, roadsides and field margins, clay, 555 m, 38°10'N, 23°34'E, 02.07.2019, *Polymenakos* 873 (ATH).

Also on Mt Pastra in eparchia Thivon.

***Filago gallica* L.**

Plateau of Dervenochoria, 2.5 km SW of Skourta, seasonally flooded abandoned field, clay, 535 m, 38°11'N, 23°31'E, 30.04.2018, *Polymenakos* 533 (ATH).

Recorded from eparchia Thivon.

***Filago germanica* (L.) Huds.**

Plateau of Dervenochoria, 2.5 km SW of Skourta, seasonally flooded abandoned field among cultivated fields, clay, 535 m, 38°11'N, 23°31'E, 30.04.2018, *Polymenakos* 532 (ATH).

New for eparchia Thivon. Throughout the plateau, usually found together with *F. gallica*, the latter always more abundant.

***Filago pygmaea* L.**

Mt Pastra, 0.8 km NW of village Panakto, roadsides and soil pockets on stony slope with *Sarcopoterium spinosum*, limestone, 590 m, 38°11'N, 23°29'E, 03.04.2018, *Polymenakos* 459 (ATHU).

New for Mt Pastra and nomos Viotias.

***Inula viscosa* (L.) Aiton (syn. *Dittrichia viscosa* subsp. *angustifolia* (Bég.) Greuter)**

Mt Pastra, in the village of Lefka, 3.7 km E of Oenoe, roadsides and abandoned fields, limestone, 330 m, 38°10'N, 23°27'E, 10.09.2017, *Polymenakos* 367 (ATHU).

New for Mt Pastra.

**Boraginaceae*****Alkanna graeca* subsp. *baeotica* (A.DC.) Nyman**

Mt Pastra, 3 km west of Pili, edge of *Quercus coccifera* scrub, limestone, 675 m, 38°12'N, 23°27'E, 16.04.2019, *Polymenakos* 749 (ATH).

New for Mt Pastra.

***Anchusa undulata* subsp. *hybrida* (Ten.) Bég.**

Plateau of Dervenochoria, 2.5 km SE of Skourta, abandoned vineyard, clay, 535 m, 38°11'N, 23°32'E, 24.03.2019, *Polymenakos* 704 (ATH).

Recorded from eparchia Thivon.

***Buglossoides arvensis* (L.) I.M. Johnst. subsp. *arvensis***

Plateau of Dervenochoria, 3.5 km SE of Stefani, cereal fields, clay, 555 m, 38°11'N, 23°34'E, 24.03.2019, *Polymenakos* 708 (ATH).

Recorded from eparchia Thivon.

***Heliotropium supinum* L.**

Plateau of Dervenochoria, SW of Skourta, seasonally flooded vineyards and fallow fields, clay, 530 m, 38°12'N, 23°32'E, 29.07.2019, *Polymenakos* 904 (ATH).

Recorded from eparchia Thivon.

***Melanortocarya obtusifolia* (Willd.) Selvi & al.**

Plateau of Dervenochoria, 2.35 km NE of Stefani, fallow fields, clay, 560 m, 38°11'N, 23°34'E, 02.03.2019, *Polymenakos* 680 (ATH).

Recorded from eparchia Thivon.

***Myosotis cadmea* Boiss.**

Plateau of Dervenochoria, 2.8 km SE of Pili, seasonally flooded fallow field, clay, 535 m, 38°12'N, 23°31'E, 24.03.2019, *Polymenakos* 721 (ATH); 2.65 km SE of Pili, damp fallow field, clay, 530 m, 38°12'N, 23°31'E, 16.04.2019, *Polymenakos* 756 (ATH).

Recorded from eparchia Thivon. Common on plateau, in wet fallow fields and vineyards.

***Myosotis congesta* Albert & A. Reyn.**

Plateau of Dervenochoria, 2.6 km SW of Skourta, in seasonally flooded uncultivated field, clay, 535 m, 38°11'N, 23°31'E, 22.04.2018, *Polymenakos* 499 (ATH); 1.9 km SE of Pili, in seasonally flooded fallow field, clay, 530 m, 38°12'N, 23°30'E, 16.04.2019, *Polymenakos* 751 (ATH).

New for eparchia Thivon, reported from eparchia Levadias. Common in the damp meadows of plateau. The corolla limb is blue in young flowers and remains blue. In the rather similar *Myosotis discolor* Pers. it is yellow, changing to blue at maturity, hence the species epithet. *Myosotis ramosissima* Rochel has larger, pale or bright blue flowers but has not been observed on the plateau.

***Myosotis sicula* Guss. (Fig. 5)**

Plateau of Dervenochoria, 2.2 km NE of village Prasino, muddy ground around seasonal pool, clay, 535 m, 38°11'N, 23°32'E, 22.04.2018, *Polymenakos* 494 (ATH); 0.65 km SW of Skourta, muddy ground around seasonal pool, clay, 535 m, 38°12'N, 23°32'E, 19.05.2018, *Polymenakos* 583 (ATH).

New for nomos Viotias.

***Myosotis stricta* Roem. & Schult.**

Plateau of Dervenochoria, 2.6 km SW of Skourta, seasonally flooded cereal field, clay, 535 m, 38°11'N, 23°32'E, 24.03.2019, *Polymenakos* 722 (ATH); 2.65 km SE of Pili, damp fallow field, clay, 530 m, 38°12'N, 23°31'E, 16.04.2019, *Polymenakos* 755 (ATH).

New for nomos Viotias, the nearest reports are from the high mountains of Sterea Ellas, viz., Vardousia, Iti, Timfristos, Oxia, etc.

***Symphytum bulbosum*** K.F. Schimp.

Plateau of Dervenochoria, 2.6 km SE of Pili, damp fallow field, clay, 555 m, 38°12'N, 23°31'E, 16.04.2019, *Polymenakos* 757 (ATH).

New for eparchia Thivon.

**Brassicaceae*****Alyssum simplex*** Rudolphi

Plateau of Dervenochoria, 3.5 km SE of Skourta, damp fallow field, clay, 535 m, 38°11'N, 23°34'E, 24.03.2019, *Polymenakos* 713 (ATH).

Reported from eparchia Thivon.

***Alyssum turkestanicum*** Regel & Schmalh.

Mt Parnitha, "Tsigourati", 3 km E of Skourta, edge of *Pinus* woodland, schist, 500 m, 38°12'N, 23°35'E, 24.03.2019, *Polymenakos* 730 (ATH).

New for Mt Parnitha.

***Erophila praecox*** (Steven) DC. (syn. *Draba praecox* Steven)

Plateau of Dervenochoria, 3.5 km SE of Skourta, damp fallow field, clay, 555 m, 38°11'N, 23°34'E, 24.03.2019, *Polymenakos* 714 (ATH).

Recorded from eparchia Thivon.

***Erophila verna*** (L.) Chevall. (syn. *Draba verna* L.)

Plateau of Dervenochoria, 1.85 km N of Stefani, cultivated and fallow fields, clay, 540 m, 38°11'N, 23°33'E, 02.03.2019, *Polymenakos* 672 (ATH).

Recorded from eparchia Thivon.

***Erysimum boryanum*** Boiss. & Spruner

Mt Pastra, 3.2 km W of Pili, stony slope with *Sarco-*



Fig. 5. *Myosotis sicula*.

*poterium spinosum*, schist, 645 m, 38°12'N, 23°27'E, 26.04.2019, *Polymenakos* 768 (ATH).

New for Mt Pastra.

***Neslia apiculata*** Fisch. & al.

Plateau of Dervenochoria, 3.5 km SE of Skourta, cereal fields, clay, 535 m, 38°11'N, 23°34'E, 24.03.2019, *Polymenakos* 709 (ATH).

Recorded from eparchia Thivon.

***Noccaea bulbosa*** (Spruner) Al-Shehbaz (syn. *Raparia bulbosa* (Spruner) F.K. Mey.)

Plateau of Dervenochoria, 2.5 km south of Skourta, stony uncultivated flats, clay, 535 m, 38°11'N, 23°33'E, 24.03.2019, *Polymenakos* 707 (ATH).

Recorded from eparchia Thivon.

**Campanulaceae*****Solenopsis laurentia*** (L.) C. Presl (Fig. 6)

Plateau of Dervenochoria, 2.6 km SW of Skourta, seasonally flooded uncultivated field, clay, 535 m, 38°11'N, 23°31'E, 30.04.2018, *Polymenakos* & *Koutsogiannopoulos* 523 (ATH).



Fig. 6. *Solenopsis laurentia*.

New for nomos Viotias and Sterea Ellas. Rare on the plateau, only found in a single locality, the plants occupying a small area of 1m<sup>2</sup>. The biotope is uncultivated flat land surrounded by cereal fields. The ground remains flooded in winter and provides a number of interesting taxa such as *Isoetes histrix*, *Ranunculus lateriflorus*, *R. ophioglossifolius*, *Juncus capitatus*, *J. pygmaeus*, *Centaureum maritimum*, *Lythrum thymifolia* and *Trifolium tenuifolium*.

### Caryophyllaceae

#### *Agrostemma githago* L. subsp. *githago*

Plateau of Dervenochoria, 2.3 km SW of Skourta, cereal field, clay, 535 m, 38°11'N, 23°31'E, 22.04.2018, *Polymenakos* 492 (ATH).

New for nomos Viotias. Common in the cereal fields of the plateau.

#### *Cerastium dubium* (Bastard) Guépin

Plateau of Dervenochoria, 2.55 km SW of Skourta, seasonally flooded vineyard, clay, 535 m, 38°11'N, 23°31'E, 05.04.2018, *Polymenakos* 467 (ATH); *loc. ibid.*, 02.03.2019, *Polymenakos* 673 (ATH).

New for eparchia Thivon collected only once from nomos Viotias (eparchia Levadias, Elikonas, *Willing* 192892, B).

#### *Corrigiola litoralis* L. subsp. *litoralis*

Plateau of Dervenochoria, 2.2 km SW of Skourta, seasonally flooded uncultivated field, clay, 535 m, 38°11'N, 23°31'E, 10.11.2018, *Polymenakos* 657 (ATH).

Reported from eparchia Thivon.

#### *Scleranthus verticillatus* Tausch

Plateau of Dervenochoria, 2.6 km SW of Skourta, seasonally flooded cereal field, clay, 535 m, 38°11'N, 23°32'E, 24.03.2019, *Polymenakos* 761 (ATH).

Reported from eparchia Thivon.

#### *Spergula arvensis* L.

Plateau of Dervenochoria, 2.7 km SW of Skourta, seasonally flooded vineyard, clay, 530 m, 38°12'N, 23°31'E, 26.04.2019, *Polymenakos* 785 (ATH).

New for nomos Viotias and Sterea Ellas. Rare on the plateau, found together with *S. pentandra* in a single locality.

#### *Spergula pentandra* L.

Plateau of Dervenochoria, 2.7 km SW of Skourta, seasonally flooded fallow field, clay, 535 m, 38°11'N, 23°31'E, 24.03.2019, *Polymenakos* 720 (ATH).

Common on plateau, recorded from eparchia Thivon.

#### *Spergularia rubra* (L.) J. & C. Presl

Mt Pastra, cemetery of village Panakton, roadsides and disturbed land, limestone, 590 m, 38°11'N, 23°29'E, 16.02.2016, *Polymenakos* 51 (ATHU).

New for Mt Pastra.

### Chenopodiaceae

#### *Atriplex prostrata* DC.

Plateau of Dervenochoria, 2.2 km NE of village Prasiino, muddy patches near dry seasonal pool, clay, 535 m, 38°11'N, 23°32'E, 10.11.2018, *Polymenakos* 660 (ATH).

New for eparchia Thivon.

#### *Chenopodium opulifolium* W.D.J. Koch & Ziz

Mt Pastra, plateau of Fouskina, vineyards and fallow fields, clay, 510 m, 38°13'N, 23°28'E, 27.12.2019, *Polymenakos* 951 (ATH).

New for Mt Pastra.

### Cistaceae

#### *Helianthemum apenninum* (L.) Mill.

Mt Parnitha, E of Skourta, along road to "Tsigourati", limestone, 550 m, 38°12'N, 23°35'E, 01.05.2019, *Polymenakos* & *Pantavos* 791 (ATH).

New for Mt Parnitha and nomos Viotias; together with Mt Pendeli, the northernmost localities in Greece.

#### *Helianthemum hymettium* Boiss. & Heldr.

Mt Pastra, between villages Pili and Panakto, stony slopes, openings in *Quercus coccifera* scrub, limestone, 550 m, 38°12'N, 23°29'E, 01.05.2019, *Polymenakos* & *Pantavos* 789 (ATH).

New for Mt Pastra.

### Colchicaceae

#### *Colchicum lingulatum* Boiss. & Spruner subsp. *lingulatum* (Fig. 7)

Mt Pastra, E of village Panakton, dry flats with *Sarcopoterium spinosum*, schist, 585 m, 38°11'N, 23°30'E, 22.04.2018, *Polymenakos* 491 (ATH).

New for Mt Pastra.

### Cyperaceae

#### *Bolboschoenus glaucus* (Lam.) S.G. Sm.

Plateau of Dervenochoria, 1.9 km SE of Pili, ditches, clay, 535 m, 38°12'N, 23°31'E, 03.06.2018, *Polymena-*



kos 604 (ATH); 1.55 km SW of Skourta, swamp, clay, 530 m, 38°12'N, 23°32'E, 01.06.2019, *Polymenakos* obs.

New for nomos Viotias. Present in most ditches on the plateau, forming an extensive swamp SW of Skourta together with *Typha domingensis*.

***Eleocharis palustris*** (L.) Roem. & Schult. subsp. ***palustris***

Plateau of Dervenochoria, 2.65 km SW of Skourta, ditches, clay, 535 m, 38°12'N, 23°31'E, 01.05.2019, *Polymenakos* & *Pantavos* 788 (ATH).

New for eparchia Thivon.

***Schoenoplectus tabernaemontani*** (C.C. Gmel.) Palla

Plateau of Dervenochoria, 1.55 km SW of Skourta, swamp, clay, 530 m, 38°12'N, 23°32'E, 06.10.2019, *Polymenakos* obs.

New for nomos Viotias, rarely recorded from Sterea Ellas. A few plants were within the *Bolboschoenus* swamp but out of reach, thus not collected. Dry inflorescences with mature fruits were harvested when the area dried out.

**Dipsacaceae**

***Cephalaria transsylvanica*** (L.) Roem. & Schult.

Plateau of Dervenochoria, 0.9 km SE of Pili, field margins and roadsides, clay, 530 m, 38°12'N, 23°30'E, 30.08.2019, *Polymenakos* 928 (ATH).

New for eparchia Thivon.

***Dipsacus fullonum*** L.

Plateau of Dervenochoria, 2.2 km ESE of Pili, ditches, clay, 530 m, 38°12'N, 23°31'E, 02.07.2019, *Polymenakos* 872 (ATH).



Fig. 7. *Colchicum lingulatum* subsp. *lingulatum*.

New for nomos Viotias.

**Fabaceae**

***Lathyrus hirsutus*** L.

Plateau of Dervenochoria, 2.2 km NE of Prasino, seasonally flooded vineyard, clay, 535 m, 38°11'N, 23°32'E, 01.06.2019, *Polymenakos* & *Pantavos* 831 (ATH).

Recorded from eparchia Thivon.

***Lathyrus pratensis*** L.

Mt Parnitha, at "Mazareika", wet meadow, clay, 455 m, 38°13'N, 23°37'E, 02.07.2019, *Polymenakos* 868 (ATH).

Recorded for Mt Parnitha.

***Lotus angustissimus*** L.

Plateau of Dervenochoria, 2.6 km SE of Pili, seasonally flooded flats, clay, 535 m, 38°12'N, 23°31'E, 02.07.2019, *Polymenakos*, 875 (ATH).

New for eparchia Thivon.

***Lotus conimbricensis*** Brot.

Mt Pastra, E of village Panakton, damp grassy flats with *Pyrus spinosa*, schist, 585 m, 38°11'N, 23°30'E, 22.04.2018, *Polymenakos* 493 (ATH).

New for Mt Pastra.

***Trifolium lappaceum*** L.

Mt. Kitheronas, northern foothills, 2.9 km E of Platees, seasonally flooded fallow field, clay, 335 m, 38°13'N, 23°17'E, 19.05.2019, *Polymenakos* & *Koutsogiannopoulos* 821 (ATH).

New for Mt Kitheronas.

***Trifolium leucanthum*** M. Bieb.

Plateau of Dervenochoria, 1.9 km ESE of Pili, wet patches at edge of cereal fields, clay, 530 m, 38°12'N, 23°309'E, 19.05.2019, *Polymenakos* & *Koutsogiannopoulos* 819 (ATH).

New for eparchia Thivon.

***Trifolium tenuifolium*** Ten.

Plateau of Dervenochoria, 2.6 km SW of Skourta, seasonally flooded uncultivated field, clay, 535 m, 38°11'N, 23°31'E, 12.05.2018, *Polymenakos* 559 (ATH); *loc. ibid.*, 03.06.2018, *Polymenakos* 603 (ATH).

New for eparchia Thivon.

***Vicia pannonica*** subsp. ***striata*** (M. Bieb.) Nyman

Plateau of Dervenochoria, 2.4 km NE of Stefani, cereal field, clay, 545 m, 38°11'N, 23°34'E, 09.04.2019, *Polymenakos* & *Pantavos* 745 (ATH).

Recorded from eparchia Thivon.

**Gentianaceae*****Centaureum maritimum*** (L.) Fritsch

Plateau of Dervenochoria, 2.2 km SW of Skourta, seasonally flooded uncultivated field, clay, 535 m, 38°11'N, 23°31'E, 30.04.2018, *Polymenakos & Koutsogiannopoulos* 527 (ATH).

New for nomos Viotias.

***Centaureum pulchellum*** (Sw.) Druce

Plateau of Dervenochoria, 2.2 km SW of Skourta, seasonally flooded uncultivated field, clay, 535 m, 38°11'N, 23°31'E, 03.06.2018, *Polymenakos* 602 (ATH).

Recorded from eparchia Thivon.

**Hyacinthaceae*****Ornithogalum divergens*** Boreau

Plateau of Dervenochoria, 2.35 km NE of Stefani, in damp fallow field, clay, 555 m, 38°11'N, 23°34'E, 16.04.2019, *Polymenakos* 760 (ATH).

New for eparchia Thivon. Found only in one locality mixed with *O. refractum* which flowers earlier.

***Ornithogalum fimbriatum*** subsp. ***gracilipes*** (Zahar.)

Landström

Mt Pastra, 3.5 km west of Pili, stony slope with sparse *Quercus coccifera* scrub, limestone, 750 m, 38°12'N, 23°27'E, 26.04.2019, *Polymenakos* 775 (ATH).

New for Mt Pastra.

***Ornithogalum nutans*** L.

Plateau of Dervenochoria, 2.2 km SE of Pili, cereal fields, clay, 545 m, 38°12'N, 23°31'E, 24.03.2019, *Polymenakos* 703 (ATH).

Recorded from eparchia Thivon.

***Ornithogalum refractum*** Schldl.

Plateau of Dervenochoria, 2.1 km NE of Stefani, fallow fields, clay, 545 m, 38°11'N, 23°33'E, 24.03.2019, *Polymenakos* 724 (ATH); Mt Parnitha, "Tsigourati", cereal fields, clay, 500 m, 38°12'N, 23°35'E, 24.03.2019, *Polymenakos* 726 (ATH).

New for Mt Parnitha and eparchia Thivon.

***Ornithogalum sibthorpii*** Greuter

Plateau of Dervenochoria, 2.5 km SW of Skourta, roadsides and field margins, clay, 535 m, 38°11'N, 23°32'E, 02.03.2019, *Polymenakos* 675 (ATH).

Reported from eparchia Thivon. The absence of external bulblets at anthesis indicate *O. sibthorpii* rather than *O. refractum* Schldl. However, *O. sibthorpii* is a 're-

placement name' for *O. nanum* Sm. and since the identity of *O. nanum* remains unresolved, Strid (2016) suggests that the name *O. sibthorpii* should not be adopted.

**Iridaceae*****Crocus chrysanthus*** (Herb.) Herb. (Fig. 8)

Mt Parnitha, 3.8 km SE of Skourta, phrygana at edge of *Pinus* forest, clay, 565 m, 38°11'N, 23°34'E, 23.12.2018, *Polymenakos & Koutsogiannopoulos* 664 (ATH); 3.7 km SE of Skourta, damp uncultivated field, clay, 565 m, 38°11'N, 23°34'E, 23.12.2018, *Polymenakos & Koutsogiannopoulos* 665 (ATH); 2.5 km SE of Skourta, uncultivated flats with few *Pyrus spinosa* shrubs, limestone, 535 m, 38°11'N, 23°33'E, 02.02.2019, *Polymenakos* 667 (ATH).

New for Mt Parnitha, recorded from eparchia Thivon. These are the easternmost collections of *Crocus chrysanthus* in Sterea Ellas, the nearest records being from Mt Parnassos.

***Romulea bulbocodium*** (L.) Sebast. & Mauri

Mt Pastra, 0.14 km SE of village Panakton, abandoned field with *Sarcopoterium spinosum*, schist, 590 m, 38°11'N, 23°30'E, 23.02.2016, *Polymenakos* 53 (ATHU); plateau of Dervenochoria, 2.5 km SW of Skourta, roadsides and field margins, clay, 535 m, 38°11'N, 23°32'E, 02.03.2019, *Polymenakos* 674 (ATH).

New for Mt Pastra.



Fig. 8. *Crocus chrysanthus*.

*Romulea columnae* Sebast. & Mauri subsp. *columnae*  
Mt Pastra, 1.1 km E of village Panakton, on dirt road,  
limestone, 555 m, 38°11'N, 23°30'E, 23.02.2016, *Polymenakos* 54 (ATHU).

New for Mt Pastra.

### Juncaceae

*Juncus capitatus* Weigel (Fig. 9)

Plateau of Dervenochoria, 2.58 km SW of Skourta,  
seasonally flooded uncultivated field, clay, 535 m,  
38°11'N, 23°31'E, 22.04.2018, *Polymenakos* 497 (ATH);  
Mt Pastra, E of village Panakton, uncultivated flats  
with *Sarcopoterium spinosum*, schist, 585 m, 38°11'N,  
23°29'E, 01.05.2019, *Polymenakos* 790 (ATH).

New for Mt Pastra and nomos Viotias.

*Juncus minutulus* V. Krecz. & Gontsch.

Plateau of Dervenochoria, 2.2 km NE of village Pra-  
sino, muddy ground by seasonal pool, clay, 535 m,  
38°11'N, 23°32'E, 30.04.2018, *Polymenakos* & *Koutsogiannopoulos* 534 (ATH).



Fig. 9. *Juncus capitatus*.

New for nomos Viotias. Found together with *Juncus pygmaeus* and *J. tenageia*.

*Juncus pygmaeus* Rich (Fig. 10)

Plateau of Dervenochoria, 2.2 km NE of village Prasino,  
muddy ground by seasonal pool, clay, 535 m, 38°11'N,  
23°32'E, 22.04.2018, *Polymenakos* 498 (ATH); plateau  
of Dervenochoria, 1.4 km SW of Skourta, edge of sea-  
sonal pool in cultivated fields, clay, 535 m, 38°12'N,  
23°32'E, 30.04.2018, *Polymenakos* & *Koutsogiannopoulos*  
525 (ATH).

New for nomos Viotias and Sterea Ellas. One of  
the four “small” members of the genus *Juncus* found  
on the plateau of Dervenochoria. *Juncus pygmaeus* is  
the only one occurring in more than one locality. It is  
present throughout the plateau, becoming locally gre-  
garious in dried-out beds of seasonal pools. The more  
common and widespread *J. bufonius* s.str. was surpris-  
ingly, not seen on the plateau.

*Juncus sphaerocarpus* Nees

Mt Parnitha, “Mazareika” E of Skourta, damp places  
at roadside, clay, 455 m, 38°13'N, 23°37'E, 01.05.2019,  
*Polymenakos* 797 (ATH); Mt Kitheronas, 2 km ENE  
of Platees, seasonally flooded cereal field, clay, 345 m,  
38°13'N, 23°17'E, 19.05.2019, *Polymenakos* & *Koutsogiannopoulos*  
824 (ATH).

New for Mt Kitheronas, Mt Parnitha and nomos  
Viotias.



Fig. 10. *Juncus pygmaeus*.

***Juncus tenageia* L. f.**

Plateau of Dervenochoria, 2.2 km NE of village Pra-sino, muddy ground by seasonal pool, clay, 535 m, 38°11'N, 23°32'E, 30.04.2018, *Polymenakos* & *Koutsogiannopoulos* 526 (ATH); *loc. ibid.*, 19.05.2018, *Polymenakos* 577 (ATH).

New for nomos Viotias and Sterea Ellas. Very rare on the plateau, found together with *Juncus minutulus* and *J. pygmaeus*.

**Lamiaceae*****Phlomis herba-venti* L. subsp. *pungens* (Willd.) Maire ex DeFillips**

Mt Pastra, 3.3 km W of village Dafni, along main road to Erythres, roadsides and margins of cotton fields, limestone, 400 m, 38°14'N, 23°23'E, 12.06.2016, *Polymenakos* 97 (ATHU).

New for Mt Pastra.

**Liliaceae*****Gagea amblyopetala* Boiss. & Heldr.**

Plateau of Dervenochoria, 2.1 km NE of Stefani, fallow fields, clay, 545 m, 38°11'N, 23°33'E, 24.03.2019, *Polymenakos* 725 (ATH).

New for eparchia Thivon.

***Gagea villosa* (M. Bieb.) Sweet**

Plateau of Dervenochoria, 1.9 km SE of Skourta, cereal fields, clay, 535 m, 38°11'N, 23°34'E, 02.03.2019, *Polymenakos* 677 (ATH).

New for eparchia Thivon.

***Tulipa hageri* Heldr. (Fig. 11)**

Plateau of Dervenochoria, 0.8 km E of Pili, in cereal and fallow fields, clay, 535 m, 38°12'N, 23°30'E, 03.04.2018, *Polymenakos* 462 (ATH); 1.6 km SE of Pili, damp fallow fields, clay, 530 m, 38°12'N, 23°30'E, 16.04.2019, *Polymenakos* 758 (ATH).

New for nomos Viotias. First described by Heldreich based on material collected "in oropedis Megalo Chorapi montis Parnethis Atticae, infra Dekeleiam", by himself and co-collector F. Hager, after whom the tulip was named. The species is still common, occurring in large numbers in several fields on the plateau. Most of the fields remain flooded till April and the showy scarlet flowers appear to emerge aquatically. They are absent from fields where deep tilling is the norm. The dissimilar *Tulipa undulatifolia* Boiss. was not observed on the plateau although it had been collected several times

in abandoned and cultivated fields on the plain of Thiva; its numbers however, are declining.

**Lythraceae*****Lythrum hyssopifolia* L.**

Plateau of Dervenochoria, 2.6 km SW of village Skourta, seasonally flooded flat, clay, 535 m, 38°11'N, 23°31'E, 22.04.2018, *Polymenakos* 500 (ATH).

Reported from eparchia Thivon.

***Lythrum thymifolia* L.**

Plateau of Dervenochoria, 2.6 km SW of village Skourta, seasonally flooded flat, clay, 535 m, 38°11'N, 23°31'E, 30.04.2018, *Polymenakos* 530 (ATH); 2.1 km SE of Pili, seasonally flooded flat, clay, 530 m, 38°12'N, 23°31'E, 19.05.2018, *Polymenakos* 578 (ATH).

Reported from eparchia Thivon. Locally gregarious at several places on the plateau.

**Malvaceae*****Abutilon theophrasti* Medik.**

Plateau of Dervenochoria, SW of village Skourta, seasonally flooded vineyards, clay, 530 m, 38°12'N, 23°32'E, 30.08.2019, *Polymenakos* 931 (ATH).

New for eparchia Thivon.

**Onagraceae*****Epilobium lamyi* F.W. Schultz**

Plateau of Dervenochoria, 2.5 km SW of village Skourta,



Fig. 11. *Tulipa hageri*.

wet roadsides and edge of cereal fields, clay, 535 m, 38°12'N, 23°31'E, 03.06.2018, *Polymenakos* 606 (ATH).

New for nomos Viotias.

### **Papaveraceae**

#### ***Papaver lecoqii* Lamotte**

Mt Pastra, 3.5 km W of Pili, stony slope with sparse *Quercus coccifera* scrub, limestone, 750 m, 38°12'N, 23°27'E, 26.04.2019, *Polymenakos* 774 (ATH).

New for Mt Pastra.

### **Plantaginaceae**

#### ***Plantago lanceolata* L.**

Plateau of Dervenochoria, 2.2 km NE of village Prasino, muddy ground at dried-out pool, clay, 535 m, 38°11'N, 23°32'E, 12.06.2018, *Polymenakos* 615 (ATH).

Reported from eparchia Thivon.

### **Poaceae**

#### ***Agrostis stolonifera* L. subsp. *stolonifera***

Plateau of Dervenochoria, 2.6 km SW of Skourta, damp fallow field, clay, 535 m, 38°11'N, 23°32'E, 12.06.2018, *Polymenakos* 616 (ATH).

New for nomos Viotias.

#### ***Alopecurus myosuroides* Huds.**

Plateau of Dervenochoria, 2.3 km SE of Skourta, edge of seasonal pool, clay, 535 m, 38°11'N, 23°32'E, 24.03.2019, *Polymenakos* 715 (ATH).

Reported from eparchia Thivon.

#### ***Alopecurus rendlei* Eig**

Plateau of Dervenochoria, 2.3 km SE of Skourta, damp fields, clay, 535 m, 38°11'N, 23°32'E, 24.03.2019, *Polymenakos* 716 (ATH); Mt Parnitha, "Tsigourati", E of Skourta, along stream passing through cereal fields, clay, 500 m, 38°12'N, 23°35'E, 24.03.2019, *Polymenakos* 727 (ATH).

New for Mt Parnitha, reported from eparchia Thivon. The dominant grass in damp fields on the plateau.

#### ***Antinoria insularis* Parl.**

Plateau of Dervenochoria, 1.3 km SW of Skourta, muddy places in dried-out bed of seasonal pool, clay, 530 m, 38°12'N, 23°32'E, 30.08.2019, *Polymenakos* 932 (ATH).

New for nomos Viotias, Sterea Ellas and mainland Greece. Previously reported only from the islands (East Aegean, Kiklades and Cretan). The plants were collected in fruiting state.

#### ***Briza minor* L.**

Plateau of Dervenochoria, 2.55 km SW of Skourta, seasonally flooded abandoned field, clay, 535 m, 38°11'N, 23°31'E, 30.04.2018, *Polymenakos* & *Koutsogiannopoulos* 528 (ATH).

New for nomos Viotias.

#### ***Bromus racemosus* L. subsp. *racemosus***

Plateau of Dervenochoria, 2.1 km NE of Prasino, muddy places in cereal field, near seasonal pool, clay, 535 m, 38°11'N, 23°32'E, 19.05.2018, *Polymenakos* 584 (ATH).

New for eparchia Thivon.

#### ***Crypsis schoenoides* (L.) Lam.**

Plateau of Dervenochoria, 2.6 km SE of Pili, seasonally flooded fields, clay, 530 m, 38°12'N, 23°31'E, 02.07.2019, *Polymenakos* 871 (ATH).

New for eparchia Thivon.

#### ***Echinaria capitata* (L.) Desf.**

Mt Pastra, W of Pili, near monastery of Zoodochos Pigi, stony slope with sparse *Quercus coccifera* scrub, limestone, 605 m, 38°12'N, 23°28'E, 22.04.2018, *Polymenakos* 490 (ATH).

New for Mt Pastra.

#### ***Elytrigia repens* (L.) Nevski subsp. *repens***

Plateau of Dervenochoria, 2.2 km NE of Prasino, roadsides and wet fallow fields, clay, 530 m, 38°11'N, 23°32'E, 01.06.2019, *Polymenakos* & *Pantavos* 830 (ATH).

Recorded for eparchia Thivon.

#### ***Gaudinia fragilis* (L.) P. Beauv.**

Plateau of Dervenochoria, 2.6 km SW of Skourta, in seasonally flooded flat, clay, 535 m, 38°12'N, 23°31'E, 19.05.2018, *Polymenakos* 580 (ATH).

Recorded for eparchia Thivon.

#### ***Hordeum geniculatum* All.**

Plateau of Dervenochoria, SW of Skourta, seasonally flooded meadow, clay, 530 m, 38°12'N, 23°32'E, 29.07.2019, *Polymenakos* 902 (ATH).

New for eparchia Thivon.

#### ***Lolium temulentum* L.**

Plateau of Dervenochoria, 2.5 km SW of Skourta, in cereal fields and damp grassland with *Alopecurus rendlei*, clay, 535 m, 38°11'N, 23°31'E, 12.05.2018, *Polymenakos* 557 (ATH).

Recorded for eparchia Thivon.

***Molineriella minuta*** (L.) Rouy

Plateau of Dervenochoria, 2.55 km SW of Skourta, damp places at edge of seasonal pool, clay, 535 m, 38°11'N, 23°32'E, 05.04.2018, *Polymenakos* 470 (ATH).

New for nomos Viotias.

***Panicum capillare*** L. subsp. *capillare*

Plateau of Dervenochoria, 2.5 km SW of Skourta, edge of cereal fields, clay, 535 m, 38°11'N, 23°31'E, 10.11.2018, *Polymenakos* 659 (ATH).

New for nomos Viotias and Sterea Ellas. Xenophyte of N American origin, common in harvested cereal fields of the plateau.

***Phalaris coerulescens*** Desf.

Plateau of Dervenochoria, 2.2 km NE of Prasino, seasonally flooded flats, clay, 530 m, 38°11'N, 23°32'E, 19.05.2019, *Polymenakos* & *Koutsogiannopoulos* 820 (ATH).

New for nomos Viotias. Common on plateau.

***Phleum phleoides*** (L.) H. Karst.

Plateau of Dervenochoria, 2.3 km NE of Stefani, fallow fields, clay, 555 m, 38°11'N, 23°34'E, 26.04.2019, *Polymenakos* 787 (ATH).

New for eparchia Thivon.

***Poa infirma*** Kunth

Plateau of Dervenochoria, 2.6 km SW of Skourta, seasonally flooded vineyard, clay, 535 m, 38°11'N, 23°31'E, 24.03.2019, *Polymenakos* 719 (ATH).

Recorded for eparchia Thivon.

***Sclerochloa dura*** (L.) P. Beauv.

Mt Parnitha, "Mazareika", on dirt road passing through fields, clay, 460 m, 38°13'N, 23°37'E, 01.05.2019, *Polymenakos* & *Pantavos* 798 (ATH).

New for Mt Parnitha.

***Taeniatherum caput-medusae*** subsp. *crinitum* (Schreb.)

Melderis

Plateau of Dervenochoria, 2.6 km SW of Skourta, seasonally flooded flat, clay, 535 m, 38°12'N, 23°31'E, 12.05.2018, *Polymenakos* 555 (ATH).

Recorded for eparchia Thivon.

***Vulpia ciliata*** Dumort. subsp. *ciliata*

Plateau of Dervenochoria, 2.3 km NE of Stefani, abandoned vineyard, clay, 560 m, 38°11'N, 23°34'E, 19.05.2019, *Polymenakos* 817 (ATH).

Recorded for eparchia Thivon.

***Vulpia muralis*** (Kunth) Nees

Plateau of Dervenochoria, 2.3 km NE of Stefani, abandoned vineyard, clay, 560 m, 38°11'N, 23°34'E, 26.04.2019, *Polymenakos* 786 (ATH); *loc. ibid.*, 19.05.2019, *Polymenakos* 818 (ATH).

Recorded for eparchia Thivon.

**Polygalaceae*****Polygala monspeliaca*** L.

Mt Pastra, 3.2 km W of Pili, stony slope with *Sarcopoterium spinosum*, schist, 645 m, 38°12'N, 23°27'E, 26.04.2019, *Polymenakos* 769 (ATH).

New for Mt Pastra and eparchia Thivon.

**Polygonaceae*****Rumex acetosella*** subsp. *acetoselloides* (Balansa) Nijs

Plateau of Dervenochoria, 2.2 km NE of Prasino, edge of cereal fields, clay, 530 m, 38°11'N, 23°32'E, 22.04.2018, *Polymenakos* 503 (ATH).

Recorded for eparchia Thivon.

**Portulacaceae*****Montia arvensis*** Wallr.

Plateau of Dervenochoria, 2.55 km SW of Skourta, damp ground at edge of seasonal pool, clay, 535 m, 38°11'N, 23°32'E, 05.04.2018, *Polymenakos* 469 (ATH); 2.6 km SW of Skourta, seasonally flooded vineyard, 535 m, 38°11'N, 23°31'E, 24.03.2019, *Polymenakos* 717 (ATH); 2.65 km SE of Pili, around seasonal pool, clay, 530 m, 38°12'N, 23°31'E, 16.04.2019, *Polymenakos* 753 (ATH).

New for nomos Viotias.

**Potamogetonaceae*****Potamogeton natans*** L.

Plateau of Dervenochoria, 0.4 km SW of Skourta, in artificial pond, clay, 530 m, 38°12'N, 23°32'E, 29.07.2019, *Polymenakos* 903 (ATH).

New for eparchia Thivon.

**Ranunculaceae*****Adonis flammea*** Jacq. subsp. *flammea*

Mt Parnitha, "Mazareika", fallow fields, limestone, 455 m, 38°13'N, 23°37'E, 01.05.2019, *Polymenakos* 795 (ATH).

Recorded for Mt Parnitha and eparchia Thivon.

***Myosurus minimus*** L. (Fig. 12)

Plateau of Dervenochoria, 2.1 km SE of Pili, seasonally flooded uncultivated flats, clay, 535 m, 38°12'N,

23°31'E, 12.05.2018, *Polymenakos* 560 (ATH); *loc. ibid.*, 26.04.2019, *Polymenakos* 784 (ATH); 1.4 km SE of Pili, around seasonal pool, clay, 530 m, 38°12'N, 23°30'E, 16.04.2019, *Polymenakos* 754 (ATH).

New for nomos Viotias. This fairly rare taxon was collected at the low altitudes of 530–535 m, together with *Myosurus heldreichii* quod vide. According to Strid (Flora of Greece website, 2018) this species is only known between 1200 and 2000 m in Greece and *M. heldreichii* is reported as occurring below 400 m. However, Kalpoutzakis & al. (2019) has also reported *M. minimus* at a low altitude of c. 220 m in East Central (Mikrothives).

***Myosurus heldreichii*** Heldr. ex H. Lév. (*M. sessilis* auct.) Plateau of Dervenochoria, 2.1 km SE of Pili, seasonally flooded uncultivated flats, clay, 535 m, 38°12'N, 23°31'E, 12.05.2018, *Polymenakos* 561 (ATH).

New for nomos Viotias and Sterea Ellas. This is apparently the first documentation of both *Myosurus heldreichii* and *M. minimus* growing together in the same locality; no hybrids were observed. *Myosurus minimus* covers the whole seasonally flooded area whereas *M. heldreichii* is restricted to only a few places. The habitat is uncultivated land but an increase in land use may threaten present populations.

***Ranunculus arvensis*** L.

Plateau of Dervenochoria, 2.3 km NE of Stefani, cereal fields, clay, 560 m, 38°10'N, 23°34'E, 02.03.2019, *Polymenakos* 678 (ATH).

Recorded for eparchia Thivon.

***Ranunculus gracilis*** E.D. Clarke

Plateau of Dervenochoria, 2.5 km S of Skourta, damp uncultivated ground near cereal fields, clay, 540 m, 38°11'N, 23°33'E, 24.03.2019, *Polymenakos* 706 (ATH).

Recorded for eparchia Thivon.

***Ranunculus lateriflorus*** DC.

Plateau of Dervenochoria, 2.2 km NE of village Prasino, muddy ground at seasonal pool, clay, 535 m, 38°11'N, 23°31'E, 30.04.2018, *Polymenakos* & *Koutsogiannopoulos* 524 (ATH).

New for nomos Viotias. The nearest occurrence of this rare taxon is at alpine level on Mt Iti. It is surprisingly common on the plateau of Dervenochoria appearing in most of the seasonally flooded fields. It grows together with *Ranunculus sardous* and the similar looking *R. ophioglossifolius* Vill.

***Ranunculus millefoliatus*** Vahl

Plateau of Dervenochoria, 2.5 km S of Skourta, damp uncultivated ground near cereal fields, clay, 540 m, 38°11'N, 23°33'E, 24.03.2019, *Polymenakos* 705 (ATH).

Recorded for eparchia Thivon.

***Ranunculus ophioglossifolius*** Vill. (Fig. 13)

Plateau of Dervenochoria, 2.55 km SW of Skourta, in seasonally flooded vineyard, clay, 535 m, 38°11'N, 23°31'E, 05.04.2018, *Polymenakos* 468 (ATH); *loc. ibid.*, 30.04.2018, *Polymenakos* & *Koutsogiannopoulos* 529 (ATH).

New for eparchia Thivon, also reported from Mt Elikonas (Kokmotos & Georgiadis 2005: 436).



**Fig. 12.** *Myosurus minimus* with *M. heldreichii* arrowed.



Fig. 13. *Ranunculus ophioglossifolius*.

*Ranunculus peltatus* Schrank subsp. *peltatus* (Fig. 14) Plateau of Dervenochoria, 2.2 km NE of village Prasi-no, seasonal pool in cereal fields, clay, 535 m, 38°11'N, 23°32'E, 03.04.2018, *Polymenakos & Koutsogiannopoulos* 461 (ATHU).

New for nomos Viotias.

*Ranunculus rumelicus* Griseb.

Mt Pastra, 3.5 km W of Pili, stony slope with sparse *Quercus coccifera* scrub, limestone, 750 m, 38°12'N, 23°27'E, 26.04.2019, *Polymenakos* 772 (ATH).

New for Mt Pastra and eparchia Thivon.

*Ranunculus trichophyllus* Chaix subsp. *trichophyllus*

Mt Pastra, 2.2 km WSW of Dafni, in artificial depression, limestone, 415 m, 38°14'N, 23°23'E, 30.04.2018, *Polymenakos & Koutsogiannopoulos* 522 (ATH).

New for Mt Pastra and eparchia Thivon. In Nomos Viotias recently reported from Mt Parnassos (*Polymenakos & Tan* 2019), and Xerouvouni (*Kokmotos & Georgiadis* 2005: 436).

### *Resedaceae*

*Reseda luteola* L.

Plateau of Dervenochoria, 2.4 km SE of Pili, fallow field, clay, 535 m, 38°12'N, 23°31'E, 19.05.2018, *Polymenakos* 581 (ATH); Mt Pastra, cereal fields between Pili and Panakto, clay, 38°12'N, 23°31'E, 19.05.2018, *Polymenakos obs.*

New for Mt Pastra and nomos Viotias.



Fig. 14. *Ranunculus peltatus* subsp. *peltatus* with grass-like leaves of *Isoetes haussknechtii* emerging.



***Reseda phyteuma* L.**

Plateau of Dervenochoria, 2.5 km SW of Skourta, damp ground at edge of fallow field, clay, 535 m, 38°11'N, 23°31'E, 19.05.2018, *Polymenakos* 582 (ATH).

New for nomos Viotias.

**Rosaceae*****Sorbus umbellata* (Desf.) Fritsch subsp. *umbellata***

Mt Kitheronas, near wind turbine, 0.6 km W of summit Profitis Ilias, limestone, 1340 m, 38°11'N, 23°14'E, 10.06.2017, *Polymenakos* 276 (ATHU).

New for Mt Kitheronas. Scattered round the summit, this taxon occurs on both sides of the border between nomos Attikis and nomos Viotias. All the plants noted were stunted, none of them bore flowers or fruit.

**Rubiaceae*****Galium debile* Desv.**

Mt Parnitha, “Mazareika” E of Skourta, wet meadow near stream, clay, 455 m, 38°13'N, 23°37'E, 19.05.2019, *Polymenakos* & *Koutsogiannopoulos* 823 (ATH).

New for Mt Parnitha and eparchia Thivon.

***Galium divaricatum* Lam.**

Plateau of Dervenochoria, 2.6 km SSW of Skourta, fallow field, clay, 535 m, 38°11'N, 23°32'E, 03.06.2018, *Polymenakos* 605 (ATH).

Recorded for eparchia Thivon.

***Galium elongatum* C. Presl.**

Mt Parnitha, “Mazareika” E of Skourta, wet meadow near stream, clay, 455 m, 38°13'N, 23°37'E, 02.07.2019, *Polymenakos* 869 (ATH).

New for Mt Parnitha and nomos Viotias. Growing mixed with *Galium debile* which flowers earlier.

***Galium tricornutum* Dandy**

Plateau of Dervenochoria, 3.5 km SE of Skourta, cereal fields, clay, 555 m, 38°11'N, 23°34'E, 24.03.2019, *Polymenakos* 710 (ATH).

Recorded for eparchia Thivon.

**Solanaceae*****Solanum alatum* Moench**

Plateau of Dervenochoria, 2.6 km SW of Skourta, vineyard, clay, 535 m, 38°12'N, 23°31'E, 10.11.2018, *Polymenakos* 661 (ATH).

New for nomos Viotias. Common on the plateau, usually together with *Solanum nigrum* L.

**Typhaceae*****Typha domingensis* Pers.**

Plateau of Dervenochoria, 1.5 km SW of Skourta, by seasonal pools, clay, 530 m, 38°12'N, 23°32'E, 30.08.2019, *Polymenakos* 933 (ATH).

Recorded for eparchia Thivon.

**Valerianaceae*****Valerianella echinata* (L.) DC.**

Plateau of Dervenochoria, 3.5 km SE of Skourta, damp fallow field, clay, 555 m, 38°11'N, 23°34'E, 24.03.2019, *Polymenakos* 711 (ATH).

Recorded for eparchia Thivon.

**Verbenaceae*****Verbena supina* L. (Fig. 15)**

Plateau of Dervenochoria, 2.2 km NE of village Prasino, muddy dried-out pool, clay, 535 m, 38°11'N, 23°32'E, 19.05.2018, *Polymenakos* 585 (ATH).

New for eparchia Thivon.

**Veronicaceae*****Kickxia commutata* subsp. *graeca* (Bory & Chaub.) R. Fern.**

Plateau of Dervenochoria, 2.2 km SW of Skourta, seasonally flooded abandoned field, clay, 535 m, 38°11'N, 23°31'E, 28.06.2018, *Polymenakos* 630 (ATH).

New for eparchia Thivon.



Fig. 15. *Verbena supina*.

***Linaria chalepensis* (L.) Mill.**

Mt Parnitha, "Mazareika" E of Skourta, fallow fields, limestone, 455 m, 38°13'N, 23°37'E, 01.05.2019, *Polymenakos* & *Pantavos* 794 (ATH).

New for Mt Parnitha.

***Veronica acinifolia* L.**

Plateau of Dervenochoria, 1.5 km E of Pili, damp places in fallow fields, clay, 535 m, 38°12'N, 23°30'E, 05.04.2018, *Polymenakos* 466 (ATH); 1.6 km SE of Pili, damp fallow fields, clay, 530 m, 38°12'N, 23°30'E, 16.04.2019, *Polymenakos* 759 (ATH).

Recorded for eparchia Thivon. Common on plateau.

***Veronica hederifolia* L.**

Plateau of Dervenochoria, 1.85 km north of Stefani, cultivated and fallow fields, clay, 540 m, 38°11'N, 23°33'E, 02.03.2019, *Polymenakos* 671 (ATH).

Recorded for eparchia Thivon.

**Violaceae*****Viola kitaibeliana* Schult.**

Plateau of Dervenochoria, 2.35 km NE of Stefani, fallow fields, clay, 560 m, 38°11'N, 23°34'E, 02.03.2019, *Polymenakos* 680 (ATH); 2.6 km SW of Skourta, seasonally flooded vineyard, clay, 535 m, 38°11'N, 23°31'E, 24.03.2019, *Polymenakos* 718 (ATH).

Recorded for eparchia Thivon.

***Viola arvensis* Murray**

Mt Parnitha, "Mazareika" E of Skourta, fallow fields, limestone, 455 m, 38°13'N, 23°37'E, 01.05.2019, *Polymenakos* & *Pantavos* 796 (ATH).

Reported from Mt Parnitha by Diapoulis (1958).

We report distributional data for 148 taxa including two which are new for the Greek mainland (*Antinoria insularis* and *Anthemis palaestina*), 7 new for the floristic region Sterea Ellas, 31 for nomos Viotias and 32 for eparchia Thivon. Several of them are rare plants of wetlands as indicated in the text. An assessment shows that Poaceae, Fabaceae and Asteraceae are the dominant families with Ranunculaceae also well represented. Since mainly new floristic records are included in this publication and not the complete floristic composition of the area, we consider it not relevant to list the actual number of taxa in each family nor the life form spectrum for the entire area.

Five aquatics, 23 geophytes and 88 therophytes have been noted. The high numbers of the latter two life form categories are due to the composition of cultivated land on the plateau. Typical species of fallow and cereal fields are present (list appended below\*) but it is interesting to note that a number of taxa associated with such agricultural habitats and present in adjacent areas, viz., *Leontice leontopetalum*, *Roemeria hybrida*, *Bellevalia ciliata*, *Linaria triphylla*, *Ceratocephala falcata*, *Geranium tuberosum*, *Cerastium dichotomum*, *Bupleurum subovatum* and *Adonis annua*, have not been found.

\*Some typical species of fallow and cereal fields listed in alphabetical order: *Agrostemma githago*, *Allium cyrilli*, *Anagallis arvensis*, *Anthemis altissima*, *Anthemis cotula*, *Astragalus hamosus*, *Bifora testiculata*, *Buglossoides arvensis*, *Bunias erucago*, *Carduus acicularis*, *Centaurea cyanus*, *Centaurea solstitialis*, *Consolida ajacis*, *Convolvulus arvensis*, *Coronilla scorpioides*, *Euphorbia helioscopia*, *Gagea villosa*, *Galium tricornerutum*, *Hippocrepis biflora*, *Lamium amplexicaule*, *Lathyrus aphaca*, *Linaria pelisseriana*, *Lolium temulentum*, *Medicago arabica*, *Medicago orbicularis*, *Melilotus indicus*, *Muscari neglectum*, *Neslia apiculata*, *Orlaya daucooides*, *Ornithogalum refractum*, *Papaver rhoeas*, *Ranunculus arvensis*, *Raphanus raphanistrum* subsp. *raphanistrum*, *Rapistrum rugosum*, *Ridolfia segetum*, *Sinapis arvensis*, *Valerianella echinata*, *Veronica hederifolia*, *Vicia hybrida*, *Vicia pannonica*, *Vicia sativa* and *Viola kitaibeliana*.

At the time of writing, the area of the plateau retains its natural character. However, a change in the manner of land exploitation could pose a significant threat to the sensitive and balanced ecosystems of the area. A considerable sector of the cultivated land is now subjected to the process of deep tilling and intensive use of herbicides. In these areas all of the rare plants we have recorded are absent. Floodplain and water diversion projects for the plateau will also significantly reduce the number of vernal pools and seasonally flooded fields, and threaten the existence of the many species that occur in these habitats, altering the rich floristic biodiversity of the area. We found 16 taxa existed in only one or two sites in the research area, thus the destruction of their habitats may cause them to disappear. These are the following: *Anthemis palaestina*, *Antinoria insularis*, *Bupleurum tenuissimum*, *Centaureum maritimum*, *Isoetes haussknechtii*, *Isoetes hystrix*, *Juncus tenageia*, *Juncus minutulus*,

*Myosotis sicula*, *Myosotis stricta*, *Myosurus heldreichii*, *Myosurus minimus*, *Ranunculus peltatus* subsp. *peltatus*, *Reseda phyteuma*, *Solenopsis laurentia* and *Spergula arvensis*. Ten of them occur fairly near an ongoing active earth excavation site. It is thus necessary to emphasize and make known the existence of the threatened biotopes. The high number of novelties indicates the floristic richness and significance of the plateau as a wetland habitat in urgent need of protection of its plant communities.

**Acknowledgements.** We thank Katerina Goula (Athens) for the identification of *Anthemis palaestina* and Burkhard Biel (Höchberg, Germany) for kindly formatting the figures for our publication.

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