

# New Floristic Records For C1 Square (Aydın-Paşayaylası)

## C1 Karesi (Aydın-Paşayaylası) İçin Yeni Floristik Kayıtlar

Research Article

**Emre Çilden and Şinasi Yıldırım**

University of Hacettepe, Faculty of Science, Department of Biology Division of Botany, Beytepe-Ankara-Türkiye

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### ABSTRACT

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In this research 48 angiosperm taxa are given as new record collected for C1 square, Aydın-Paşayaylası.

#### Key Words

New square records, C1 square, Aydın-Paşayaylası.

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### ÖZET

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Bu araştırmada Aydın-Paşayaylası'ndan toplanan 48 kapalı tohumlu bitki taksonu C1 karesi için yeni kayıt olarak verilmektedir.

#### Anahtar Kelimeler

Yeni kare kayıtları, C1 karesi, Aydın-Paşayaylası

**Article History:** Received December 17, 2011; Revised March 20, 2012; Accepted May 3, 2012; Available Online: June 19, 2012

**Correspondence to:** Emre Çilden, Hacettepe University, Faculty of Science, Department of Biology, Beytepe Campus, Ankara-Turkey

Tel: +90312 297 8008

Fax: +90312 299 2028

E-Mail: cilden@hacettepe.edu.tr

## INTRODUCTION

**P**aşayaylası is a plateau of Aydın and placed in northeast of the province. It is in Mediterranean phytogeographical region and C1 square according to Davis' squares system [1]. The research area surrounded by Yılmazköy village on the south, İzmir-Aydın province border on the north, Karaköy village on the east and Dağeymiri village on the west. The research area lies on Aydın mountains and altitude differs from 55 to 1615 meters [2].

The plant taxa were collected during the research named "*The Flora and Ethnobotany of Paşayaylası (Aydın)*" between 2008-2010 [3].

## MATERIALS AND METHODS

Specimens are collected during the research named "*The Flora and Ethnobotany of Paşayaylası (Aydın)*" between 2008-2010.

Plant materials were identified according to The Flora of Turkey and The East Aegean Islands basically [1, 4-6] and Yıldırım's chorology papers were checked for the new square records [7-31]. Brummit et al.'s book was used for authors' names [32].

## Abbreviations

EÇ: Emre Çilden  
GZ: Golshan Zare  
ŞY: Şinasi Yıldırım

## RESULTS

### RANUNCULACEAE

**Ranunculus isthmicus** Boiss. *subsp. stepporum* Davis

C1 AYDIN: Paşayaylası pathway, between Yılmazköy and Doğanköy, riverside, valley, 150-200 m, 03.04.2009, ŞY 35410 & EÇ.

### PAPAVERACEAE

**Papaver macrostomum** Boiss. & A. Huet ex Boiss. C1 AYDIN: Between Zeytinköy village and Aydın province, 100-400 m, 25.05.2009, EÇ 1143-b & GZ, Irano-Turanian element.

**Corydalis rutifolia** (Sibth. & Sm.) DC. *Subsp. erdelii*

C1 AYDIN: Above Dağeymiri village, mountainside, the hills across Tire, 1445-1455 m, 13.05.2010, EÇ 1349.

### BRASSICACEAE (CRUCIFERAE)

**Brassica rapa** L.

C1 AYDIN: Between Zeytinköy village and Aydın Governor's House, pathway near riverside, 100-300 m, 30.04.2009, EÇ 1067 (cultivated).

**Erucaria hispanica** (L.) Druce

C1 AYDIN: Between Yılmazköy and Doğanköy villages, 100-400 m, 30.04.2009, EÇ 1085.

**Isatis tinctoria** L. *subsp. corymbosa* (Boiss.) P. H. Davis

C1 AYDIN: Between Paşayaylası and Zeytinköy village, west slopes, pathway, near riverside, 650-800 m, 25.05.2009, EÇ 1121 & GZ.

**Isatis floribunda** Boiss. ex Bornm.

C1 AYDIN: Between Paşayaylası and Zeytinköy village, on the way to mountain, 700-800 m, 22.04.2010, EÇ 1278, endemic, Least Concern (LC), Irano-Turanian element.

**Iberis spruneri** Jord.

C1 AYDIN: Across Karlık hill, rocky pathway, 1515 m, 24.04.2010, EÇ 1334, Mediterranean element.

**Aethionema polygaloides** DC.

C1 AYDIN: Above Dağeymiri village, mountainside, top of Karlık hill, 1550-1570 m, 24.04.2010, EÇ 1331, Mediterranean element.

**Alyssum foliosum** Bory & Chamb. *var. megalocarpum* Hal.

C1 AYDIN: Between Paşayaylası and Zeytinköy village, west slopes, pathway, near riverside, 820-1100 m, 25.05.2009, EÇ 1113-f & GZ, Mediterranean element.

**Draba bruniifolia** Stev. *subsp. olympica* (Sibth. ex DC.) Coode & Cullen

C1 AYDIN: Above Dağeymiri village, mountainside, 1445-1540 m, 24.04.2010, EÇ 1328.

**Erysimum aciphyllum** Boiss.

C1 AYDIN: Above Dağeymiri village, mountainside, the rocky hills across Tire - northeast of Paşayaylası, 1405 m, 13.05.2010, EÇ 1343, Mediterranean element.

### CARYOPHYLLACEAE

**Arenaria rotundifolia** Bieb.

C1 AYDIN: *Pinus nigra* forest above Paşayaylası, the area in front of Paşayaylası hotel, 1215-1300 m, 25.05.2009, EÇ 1102-e; between Paşayaylası and

Zeytinköy village pathway, west slopes, pathway, near riverside, 650-800 m, 25.05.2009, EÇ 1124 & GZ.

**Arenaria acerosa** Boiss. & Heldr.

C1 AYDIN: Above Dağeymiri village, mountainside, the rocky hills across Tire - northeast of Paşayaylası, 1430-1440 m, 13.05.2010, EÇ 1347, endemic, Least Concern (LC).

**Petrorhagia alpina** (Habl.) Ball & Heywood *subsp. olympica* (Boiss.) Ball & Heywood

C1 AYDIN: Pathway between Paşayaylası and Zeytinköy village, 730 m, 22.04.2010, EÇ 1290.

**Vaccaria pyramidata** Medik.

C1 AYDIN: Paşayaylası pathway, riverside, 330-375 m, 20.03.2010, EÇ 1201.

**Agrostemma githago** L.

C1 AYDIN: Pathway between Paşayaylası and Zeytinköy village, west slopes, pathway, near riverside, 480-600 m, 25.05.2009, EÇ 1135 & GZ.

#### CHENOPODIACEAE

**Beta lomatogona** Fisch. & Mey.

C1 AYDIN: Paşayaylası pathway, riverside, 330-375 m, 20.03.2010, EÇ 1212, Irano-Turanian element.

#### HYPERICACEAE (GUTTIFERAE)

**Hypericum scabrum** L.

C1 AYDIN: Paşayaylası pathway, *Pinus nigra* forest, in scrubby, 765 m, 16.08.2008, ŞY 35118.

#### MALVACEAE

**Althaea cannabina** L.

C1 AYDIN: Between Zeytinköy village and Aydın Governor's House, pathway near riverside, 100-300 m, 30.04.2009, EÇ 1079.

#### ZYGOPHYLLACEAE

**Peganum harmala** L.

C1 AYDIN: Above Dağeymiri village, mountainside, 1445-1540 m, 24.04.2010, EÇ 1324.

#### FABACEAE (LEGUMINOSAE)

**Robinia pseudoacacia** L.

C1 AYDIN: Pathway between Paşayaylası and Zeytinköy village, 135-435 m, 22.04.2010, EÇ 1296 (Cultivated).

**Lathyrus aphaca** L. var. **biflorus** Post

C1 AYDIN: Between Paşayaylası and Zeytinköy village, west slopes, pathway, near riverside, 820-1100 m, 25.05.2009 & GZ, EÇ 1113-b; between

Zeytinköy village and Aydın province, 100-400 m, 25.05.2009, EÇ 1145 & GZ; at Paşayaylası-Zeytinköy village turnout, 310 m, 20.03.2010, EÇ 1233; Anbarcık village cemetery, 250 m, 20.03.2010, EÇ 1240-b.

**Trifolium physodes** Stev. ex Bieb var. **physodes**

C1 AYDIN: Paşayaylası pathway, old picnic area around stream, 330-380 m, 29.04.2009, EÇ 1000-a, Mediterranean element.

#### ROSACEAE

**Cerasus avium** (L.) Moench

C1 AYDIN: Ridgeway between Paşayaylası and Zeytinköy village, 1125 m, 22.04.2010, EÇ 1257 (Cultivated).

**Crataegus aronia** (L.) Bosc. ex DC. var. **aronia**

C1 AYDIN: Ridgeway between Paşayaylası and Zeytinköy village, 630 m, 22.04.2010, EÇ 1286; above Dağeymiri village mountainside, Tire-Ovacık descent ridgeway, 1100-1270 m, 13.05.2010, EÇ 1368; gardens between Karaköy village - Paşayaylası, 1000-1100 m, 01.06.2010, EÇ 1400.

**Malus sylvestris** Mill. *subsp. orientalis* (Uglitzk.) Browicz var. **orientalis**

C1 AYDIN: Ridgeway between Paşayaylası and Zeytinköy village, 1125 m, 22.04.2010, EÇ 1255.

#### APIACEAE (UMBELLIFERAE)

**Pimpinella anisum** L.

C1 AYDIN: Paşayaylası pathway, riverside, above Yılmazköy village, 330-375 m, 20.03.2010, EÇ 1209 (Cultivated).

**Zosima absinthifolia** (Vent.) Link

C1 AYDIN: Between Karaköy and Yılmazköy villages, 320-585 m, 17.06.2009, EÇ 1154; near Yılmazköy village, 200 m, 17.06.2009, EÇ 1156.

#### ASTERACEAE (COMPOSITAE)

**Gundelia tournefortii** L.

C1 AYDIN: Aydın-İzmir highway/railway border, empty gardens, 21.03.2010, EÇ 1254, Irano-Turanian element.

**Cirsium arvense** (L.) Scop *subsp. vestitum* (Wimm. & Grab.) Petrak

C1 AYDIN: Pathway between Paşayaylası and Zeytinköy village, 730 m, 22.04.2010, EÇ 1293.

**Centaurea depressa** Bieb.

C1 AYDIN: Pathway between Paşayaylası and Zeytinköy village, 700-800 m, 22.04.2010, EÇ 1282.

**Centaurea reuterana** Boiss. var. **phrygia** Bornm.  
C1 AYDIN: Above Paşayaylası, *Pinus nigra* forest, 1250-1450 m, 29.04.2009, EÇ 1034; mountainside above Dağeymiri village, 1400-1425 m, 24.04.2010, EÇ 1321b, endemic, Least Concern (LC), E. Mediterranean element.

**Centaurea reuterana** Boiss. var. **reuterana**  
C1 AYDIN: Mountainside above Dağeymiri village, 1400-1425 m, 24.04.2010, EÇ 1321, endemic, Least Concern (LC), E. Mediterranean element.

**Leontodon asperrimus** (Willd.) J. Ball  
C1 AYDIN: Above Yılmazköy village, *Pinus brutia* and scrub forest, 300-400 m, 01.06.2010, EÇ 1387, Irano-Turanian element.

#### CAMPANULACEAE

**Campanula involocrata** Aucher ex A. DC.  
C1 AYDIN: Between Paşayaylası and Zeytinköy village pathway, west slopes, pathway, riverside, 820-1100 m, 25.05.2009, EÇ 1111 & GZ; above Dağeymiri village, mountainside, the rocky hills across Aydın province northeast of Paşayaylası, 1405 m, 13.05.2010, EÇ 1357.

#### CONVOLVULACEAE

**Convolvulus galaticus** Rostan ex Choisy  
C1 AYDIN: Between Paşayaylası - Zeytinköy, west slopes, pathway, near riverside, 820-1100 m, 25.05.2009 & GZ, EÇ 1108, endemic, least concern (LC), Irano-Turanian element.

**Ipomoea purpurea** (L.) Roth  
C1 AYDIN: Empty cropfields between Yılmazköy village and Aydın-İzmir railway border, 55-120 m, 19.07.2010, EÇ 1409.

#### SOLANACEAE

**Solanum cornutum** Lam.  
C1 AYDIN: Outside of Kalfaköy village cemetery, on pathway to Kalfaköy, 90-100 m, 27.10.2009, EÇ 1190.

#### SCROPHULARIACEAE

**Chaenorhinum minus** (L.) subsp. **minus**  
C1 AYDIN: Paşayaylası pathway, *Pinus nigra* forest, in scrubby, 765 m, 16.08.2008, ŞY 35128.

**Veronica verna** L.  
C1 AYDIN: Below Paşayaylası hotel, riverside, 1230-1260 m, 29.04.2009, EÇ 1028-a, Euro-Siberian element.

**Euphrasia pectinata** Ten.

C1 AYDIN: Between Paşayaylası-Zeytinköy village ridgeway, 1125 m, 22.04.2010, EÇ 1261, Irano-Turanian element.

#### LAMIACEAE (LABIATAE)

**Stachys bombycina** Boiss.  
C1 AYDIN: Between Elmalık locality and Zenginevler locality, 1100-1250 m, 19.07.2010, EÇ 1407, endemic, near threatened (NT), E. Mediterranean element.

#### LILIACEAE

**Asphodeline taurica** (Pallas) Kunth  
C1 AYDIN: Paşayaylası area, *Pinus nigra-Juglans regia* community, towards Cevizli mountains, 1250-1300 m, 16.08.2008, ŞY 35149, E. Mediterranean element.

**Ornithogalum comosum** L.  
C1 AYDIN: Above Dağeymiri village, mountainside, top of Karlık Hill, 1550-1570 m, 24.04.2010, EÇ 1332.

#### POACEAE (GRAMINEAE)

**Elymus elongatus** Host  
C1 AYDIN: Between Paşayaylası and Zeytinköy village pathway, west slopes, pathway, near riverside, 650-800 m, 25.05.2009, EÇ 1130-d & GZ.

**Bromus arvensis** L.  
C1 AYDIN: The area in front of Paşayaylası hotel, *Pinus nigra* forest above Paşayaylası, 1215-1300 m, 25.05.2009, EÇ 1102-d.

**Bromus lanceolatus** Roth  
C1 AYDIN: Above Dağeymiri village, mountainside, the rocky hills across Tire - northeast of Paşayaylası, 1445-1455 m, 13.05.2010, EÇ 1350-a.

#### DISCUSSION

During the research on the flora of Paşayaylası (Aydın), 48 species are determined as new record for C1 square. These belong to Mediterranean (9 species), Euro-Siberian (1 species) and Irano-Turanian (7 species) phytogeographical regions. *Brassica rapa* L., *Robinia pseudoacacia* L., *Cerasus avium* (L.) Moench are cultivated.

6 species are endemic: Although *Isatis floribunda* Boiss. ex Bornm. was from central Anatolia, the other species were generally known

from closer squares to C1 square. *Arenaria acerosa* Boiss. (B2, C2), *Centaurea reuterana* Boiss. var. *phrygia* Bornm. (B3, C2, C3), *Centaurea reuterana* Boiss. var. *reuterana* (C2, C3), *Convolvulus galaticus* Rostan ex Choisy (A4, B4, C2), *Stachys bombycina* Boiss. (C2). Anthropogenic effect can be play a role spreading of *I. floribunda* Boiss. ex. Bornm. from central to west Anatolia. Although five of these species are at "least concern (LC)" danger category, *S. bombycina* Boiss. is at "near threatened (NT)" category [33-34].

*Solanum cornutum* Lam. firstly recorded for Anatolian part of Turkish flora from A4 square by Erik, S. and Akaydın, G., [35], but our specimen's corolla is violet not yellow.

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