

Article

Phytosociology and Vegetation of Plants of Beit Jibrin in Palestine

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Abstract: This paper describes a study on the vegetation and floristics of the territory of Beit Jibrin in Palestine, in areas such as Forest the Snabreh (Qasa), Khallet Mahmoud and Khallet AL-Taweel, among others. In view of the lack of studies on the phytosociology and communities of plants in the south-west of Palestine, as this region represents a unique diversity of plants, and the addition of these plants to Mediterranean Basin region plants, we conducted this study to identify and describe the plants of this region. Beit Jibrin is an ancient Canaanite Palestinian city that belongs to inframediterranean and thermomediterranean thermotypes, as well as arid, semi-arid and dry ombrotypes. This area is very important floristically, with a high rate of endemism: of the 290 species documented, 37 of them (12.75%) were endemic to the region. Vegetation was sampled on twelve representative plots (releves) and analyzed using the Braun-Blanquet phytosociological analysis method. Two communities of forest maquis, macchie and steppe vegetation were found. Forest vegetation were represented by the *Cupresso sempervirentis–Pinetum halepensis* ass. nova. association, in the class of *Quercetea ilicis* Br.-Bl. ex. A. and O. Bolòs 1950, the order of *Pinetalia halepensis*, Biondi et al. (2014), and a new alliance: *Cupresso sempervirentis–Pinus halepensis*; forests maquis vegetation as the association of *Pistacio lentisci–Quercetum calliprini* ass. nova., with the suggested new class of *Quercetea calliprini* or *palaestini* in addition to *Quercetea ilicis* Br.-Bl. ex. A. and O. Bolòs 1950 and the order of *Quercetalia calliprini* (Zohary 1960), with an alliance of *Quercion calliprini* (Zohary 1960). These were adapted in arid, semi-arid, dry and sub-humid ombrotypes, as well as infra- and thermotropical to mesomediterranean thermotypes, with many different types of soils, such as limestone, brown ruisenas, terra rossa and others.

Keywords: floristics; plant communities; taxonomy; ecology; associations



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1. Introduction

Palestine is a hotspot for biodiversity and flora, and is considered one of the most biodiverse countries in West Asia and the Mediterranean coast. Palestinian coastal waters and mountain highlands possess a large level of biological diversity, in addition to many endemic and native species. Geographical and biological diversity is very important, consisting of landscapes and ecosystems that include areas of mountainous heights, plains, valleys, cliffs, sand dunes, steppes and forests. This prompted us to study the plant species of an important region located to the southwest of Palestine, west of the Jordan River and the Dead Sea, with the varieties of wild and forest plants it represents, as it is fertile and rich in forests of various plants. Given the lack of studies on plants' phytosociology or plant communities in this region, as well as its geographical, topographical, biological and biodiversity importance, it was necessary to work on studying the taxonomic, phytosociological and biological characteristics of plants and others. Ecological, climate change, climatic and bioclimate factors play an important role in plant distribution and biodiversity [1–3]. More than 2780 plant species have been studied, of which 162 species were endemic;

872 genera and 144 families have been recorded for Palestinian flora [2–15]. Furthermore, some scientists have studied plant communities, the phytosociology of plants [16–18] and biodiversity in Palestine [19] in addition to the Mediterranean region [20–28]. The purpose of this paper is to study the phytosociology and plant taxa species of the Beit Jibrin region in the southwest of Palestine as well as of the Mediterranean Basin region, especially the eastern Mediterranean.

2. Materials and Methods

2.1. Study Area

Beit Jibrin (Jibreen) is a Palestinian Arab Canaanite village located 21 km northwest of Hebron and 13 km west of the village of Idna-Hebron, a wide area of hills, mountains and various valleys between the coastal plain to the west and the highland of Hebron to the east, where it is located within coordinates (31°36'19" N, 34°53'54" E), with rises 275 m above sea level [29]. The total area of the village is 56,185 dunums (56.1 km²), of which 28 km² are built-up whereas the rest remains as agricultural land [30,31]. Moreover, Beit Jibrin is characterized by the presence of many different archaeological caves (Caves 1000), which were included as a "United Nations Educational, Scientific and Cultural Organization" (UNESCO) World Heritage Site [32], near which there are many different plants, such as thyme, *Pistachios* spp., *Rhamnus* spp., *R. palaestinus* Boiss. and various herbal plants (Figure 1).



Figure 1. Vegetation in Beit Jibrin (Palestine).

2.2. Vegetation Data Collection

The study included the sampling area in Beit Jibrin, occupied since 1948, where the selection of and data collection of 290 woody plants took place, from Beit Jibrin forests or its hills, as well as some of the scrubland areas, to take biological and ecological indicators and plants for their traditional and thermal patterns (Table 1 and Figure 2A). These data were taken by using a Braun-Blanquet methodology [33,34]. We created a matrix of 290 × 12 related columns to convert the Braun-Blanquet plant phytosociological indicators (+ = 2, 1 = 3, 2 = 4, 3 = 5, 4 = 6 and 5 = 7) into ones of Van der Maarel [35] (5: covering more than 3/4 of the area; 4: any number of individuals covering 1/2–3/4 of the area; 3: any number of individuals covering 1/4–1/2 of the area; 2: very numerous or covering at least 5% of the area; and 1: plentiful but of small cover value, and + is a very small amount of cover) (Figure 2B). However, we used a phytosociological nomenclature code in the description of the new syntaxons in the study [36–38] and Euclidean distances as well

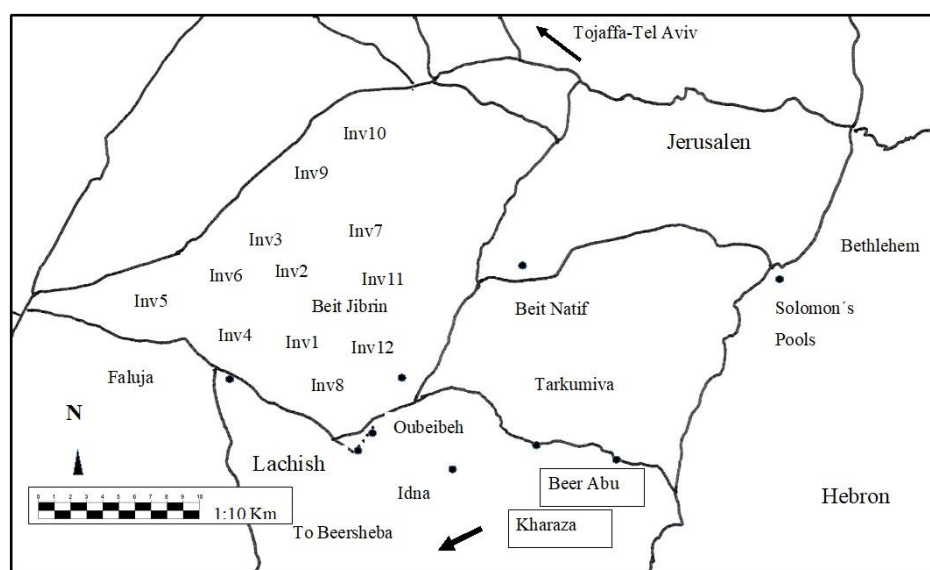
as principal component analysis to evade any lack of data on whole-plant analysis; the XLSTAT Statistical Software for Excel program was used in the analysis process.

All the sites mentioned in the table are located in the area of Beit Jibreen and its surroundings—the name of Tal Sandhanh has been changed to Beit Guvrin-Maresha National Park.

The plants of Palestine, Syria, Lebanon, Jordan, Negev Desert, the Sinai desert and the Mediterranean coast were used in the study of flora, as cover vegetation of sites in the west of Hebron to the east of the occupied Palestinian coasts, such as Beer Sheva, Ashdod, Ashqelon (Asgalan or Al-Majdal), Lod, Ramle, Jaffa, Haifa, Safad, Acre, Iraq Mansheya and Al-Jalil, and neighboring villages, such as Ajjur, Beit Nir, Al-Dawaimah, Kidna, Faluja, Deir Ula, Qubeibeh, Zachariah and Idna [16–18], which form part of this adjacent plant environment. The vegetation has been explicated according to many methodological works, such as Braun-Blanquet and Bolòs [37], Bolòs [39], Oakley [40], Bolòs et al. [41], Pott [42], Biondi [43] and Rivas-Martinez et al. [44–51]. The west Hebron area has a dry climate, inframediterranean to thermomediterranean thermotype, with precipitation ranges between 250 and 550 mm, and Beit Jibrin is a part of this area and the climate [1,18].

Table 1. Sampling regime.

| Inventories | Coordinates | Site | Altitude | Biogeographic Unit |
|-------------|-------------|---|----------|---------------------------------|
| Inv. 1 | 31°34'31" | Forest the Snabreh (Qasa) | 325 | Mediterranean basin territories |
| Inv. 2 | 31°34'34" | Forest Deir Nakhas | 285 | Mediterranean basin territories |
| Inv. 3 | 31°34'40" | Khallet Mahmoud and Khallet Ataweel | 275 | Mediterranean basin territories |
| Inv. 4 | 31°34'38" | Khallet Deir Nakhas, Abu Rkheem and Khallet Al-Moghiti | 270 | Mediterranean basin territories |
| Inv. 5 | 31°34'45" | Al-Qagab | 260 | Mediterranean basin territories |
| Inv. 6 | 31°34'42" | Stoning of Azzami, Ganam Am-Ghamis and Khallet Al-naje | 310 | Mediterranean basin territories |
| Inv. 7 | 31°34'30" | Tal Sandhanh | 350 | Mediterranean basin territories |
| Inv. 8 | 31°34'50" | Beit Jibrin Center | 300 | Mediterranean basin territories |
| Inv. 9 | 31°34'33" | Merhan Al-Motalah, Khirbit Am-Alahem and Wadi Al-Arabe, Yardeh, Ain-Ismael Ayesh | 370 | Mediterranean basin territories |
| Inv. 10 | 31°34'34" | Wadi Abu Al Khail, Rasm Al-hajj Ahmad, Wadi Algoga, Khallet Abu Jaber, Al-moalaga | 300 | Mediterranean basin territories |
| Inv. 11 | 31°34'22" | Khallet Al-Qaisi and Wadi Al-sheikh Barak | 310 | Mediterranean basin territories |
| Inv. 12 | 31°34'15" | Tal-Arbid, surrounding Beit Nair | 350 | Mediterranean basin territories |

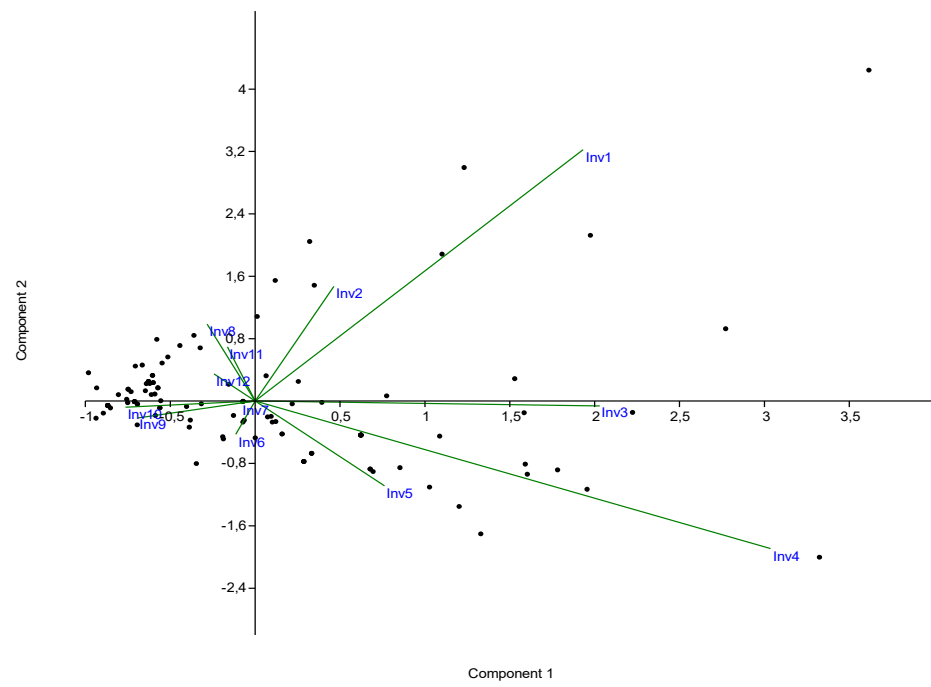


(A)

Figure 2. Cont.



(B)



(C)

Figure 2. Cont.

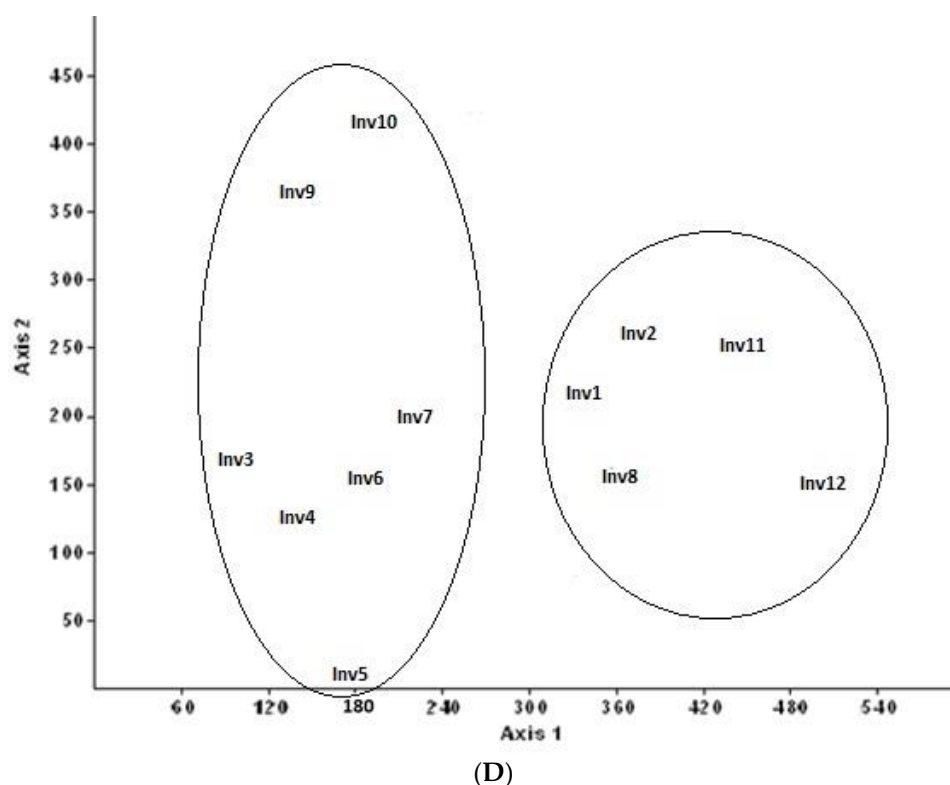


Figure 2. (A) The study area from which samples were taken is located in Beit Jibrin; (B) the study area and where the samples were selected by satellite; (C) the principal component analysis; and (D) detrended correspondence analysis.

2.3. Statistical Analyses

Data were used to create an Excel table with 290 rows (plants) and 12 columns (relèves); from this table we created a Euclidean distance matrix (DCA), to measure distance, and similarity, by the procedure known as the full correlation method. We subsequently applied principal component analysis (PCA), having previously generated two matrices of correlation and covariance values, and detrended correspondence analysis (DCA) ordination analysis. The statistical software tool used was Community Analysis Package (CAP) 4.0, producing two clearly distinct inventories. However, we have two associations or communities: association 1 (ASL1), consisting of forest samples (groups 1, 2, 8, 11 and 12), and association 2 (ASL2), consisting of groups 3, 4, 5, 6, 7, 9 and 10, which were grouped together in (PCA) and (DCA).

3. Result and Discussion

3.1. Forests Vegetation

Cupresso sempervirentis–Pinetum halepensis ass. nova

Inventories 1, 2, 8, 11 and 12 were dominated by species belonging to *Pinus* and coniferous woodland, such as *C. sempervirens* L., *C. arizonica* L., *C. macrocarpa* L., *P. halepensis* Miller, *P. pinea* L., *P. canariensis* C. Smith, *P. brutia* Tenore, *J. phoenicea* L., *J. excelsa* M. Bieb., and *J. drupacea* Labill., the association dominated by *P. halepensis* Miller, *P. pinea* L., *P. canariensis* C. Smith., *P. brutia* Tenore, *C. sempervirens* L., *C. sempervirens* L. var. *horizontalis* Miller, *C. arizonica* Greene, *T. occidentalis* L., *J. phoenicea* L., *J. excelsa* M. Bieb., *J. drupacea* Labill., *A. monspessulanum* L., *F. retusa* L., *F. sycomorus* L., *F. cariaca* L., *C. equisetifolia* L. *M. alba* L., *M. nigra* L., *O. ficus indica* (L.) Mill., *O. robusta* J.C. Wendl., *O. ficus-barbarica* A. Berger, *S. alba* L., *P. alba* L., *P. nigra* L., *P. euphratica* Oliver, *Q. calliprinos* Webb. or *Q. palaestina* K., *Q. inthaburensis* Decne., *Q. boissieri* Reut. or *Q. boissieri* Reut. var. *latifolia* (Boiss.) Zohary, *Q. infectoria* Olivier, *Q. cerris* L., etc., *P. lentiscus* L., *R. palaestinus* Boiss.

(*R. lycioides* L.), *R. alaternus* L., *Z. Spina-christi* L., *A. spinosa* L., *R. palaestinum* Feinbrun, *A. foetida* L., *C. abyssinica* Kunth and Bouche, *L. barbarum* L., *L. europaeum* L., *L. depressum* Stocks, *L. schweinfurthii* Dammer, *L. shawii* Roem. and Schult., *S. sinaicum* Boiss., *S. incanum* L., *P. pungens* Willd., *P. brachyodon* (Boiss.) Zohary, *P. chrysophylla* Boiss., *B. arabica* (Boiss.) Maire and Weiller, *P. platystegia* Post., *P. viscosa* Poir., *S. dominica* L., *S. lanigera* Poir., *S. thymbra* L., *S. thymbriifolia* Hedge and Feinbrun, *S. palaestina* L., *S. fruticosa* Miller, *S. officinalis* L., *S. palaestina* Benth., *S. aethiopsis* L., *M. fruticosa* (L.) Druce., *T. capitatum* L., *T. creticum* L., *T. capitata* (L.) Cav., *T. spicata* L., *B. populneus* (Schott and Endl.) R.Br., *C. spinosa* L., *C. sicula* Duh., *C. aegyptia* Lam., *A. halimus* L., *N. mucronata* (Forssk.) Asch. and Schweinf., *H. persicum* Bunge, *H. negevensis* (Iljin and Zohary) L. Boulos, *A. macrostachyum* (Morici.) K. Koch, *A. javanica* (Burm.f.) Juss. ex Schult., *S. fruticosa* (L.) A. J. Scott, *S. palaestina* Eig. and Zohary, *H. lancifolius* (Boiss.) Kothe-Heinr., *H. salicornicum* (Moq.) Bunge ex Boiss., *O. natrix* L., *L. nobilis* L., *P. aquilinum* (L.) Kuhn, *M. azedarach* L., *P. mascula* (L.) Miller, *A. filiculoides* Lam., *L. pyrotechnica* (Forssk.) Decne., *S. officinalis* L., *A. aleppica* DC., *G. tournefortii* L., *A. arborescens* L., *A. monosperma* Delile, *A. garcinii* (Burm.f.) DC., *P. dioscoridis* (L.) DC., *A. sieberi* Besser., *A. horridus* L., *A. palaestinus* Baker, *G. villosa* Willd., *E. aphylla* Forskal, *E. foeminea* Forssk., *A. halimus* L., *A. setifera* Moq., *A. syriaca* Iljin, *A. orientalis* (L.) Boiss., *A. strigosa* Boiss. and Hohen., *A. tinctoria* (L.) Tausch, *A. altissima* (Miller) Swingle, *R. chalepensis* L., *T. hirsuta* (L.) Endl., *V. eremobium* Murb., *V. fruticosum* Post., *H. helix* L., *E. crassifolium* L'Her., *E. glaucophyllum* (L.) L'Hér., *E. arborescens* (Desf.) Willd., *E. acaule* (L.) Becherer and Thell., *E. creticum* Lam., *E. falcatum* F. Delaroché, *E. glomeratum* Lam., *E. maritimum* L., *E. cannabinum* L., *E. hierosolymitana* Boiss., *E. hirta* L., *E. hirsuta* L., *E. terracina* L., *B. aegyptiaca* (L.) Delile, *Z. dumosum* Boiss., *F. bruguieri* DC., *F. mollis* Delile, *F. orientalis* C. Presl., *F. arabica* L., *C. arabica* (Boiss.) Diagn. Pl. Orient, *C. lanatus* Vahl., *C. colocynthis* (L.) Schrader, *C. s. dorycnium* L., *I. cairica* (L.) Sweet, *I. imperati* (Vahl.) Griseb., *H. aureus* L., *P. orientalis* (L.) Feinbrun, *M. myrtifolia* Boiss. et Hohen., *M. nervosa* (Desf.) Benth., *C. insulare* (Candargy) Govaerts, *E. cannabinum* L., *D. bovei* (DC.) Anderb., *H. sanguineum* (L.) Kostel., *I. maris-mortui* Feinbrun, *C. iphionoides* (Boiss. and Blanche) Brul., *C. tinctoria* (L.) J. Gay, *C. reuteriana* Boiss., *C. syriaca* Boiss., *E. philistaeus* Feinbrun and Zohary, *V. villosa* Roth., *F. thymifolia* (L.) Webb., *G. canum* Req. ex DC., *G. elongatum* C. Presl., *G. humifusum* M. Bieb., *C. acutum* L., *E. glomeratum* Poir., *E. fruticosum* Desf., *E. angustifolium* Mill., *P. orientalis* (L.) Feinbrun, *H. bacciferum* Forssk., *H. arbainense* Fresen., *M. ciliata* (Forskal) I. M. Johnston, *C. creticum* Mill., *F. vulgare* Miller, *F. biverticillata* J. Thieb., *F. communis* L., *F. orientalis* L., *F. tingitana* L., *F. syriaca* Boiss., *C. maculatum* L., *F. clypeata* (L.) Medik., *F. eriocarpa* (DC.) Boiss., *D. harra* (Forssk.) Boiss., *E. crassipes* Fisch. and C. A. Mey., *F. bisumbellata* (Forssk.) Bubani, *F. tenacissima* L., *V. cruciatum* Sieber ex Boiss., *G. arabicum* Fresen., *G. flavum* Crantz, *G. grandiflorum* Boiss. and A. Huet., *H. micranthus* L., *H. hemistemon* J. Gay, *H. bulbosum* L., *F. arundinacea* Schreb., *H. triquetrifolium* Turra, *A. parvifolia* Sm., *I. palaestina* (Baker) Boiss., *J. unilateralis* (Roem. and Schult.) O'Donnell, *K. aegyptiaca* (L.) Nabelek, *K. judaica* Danin, *L. nudicaulis* (L.) Hooker fil., *L. tuberosus* L., *L. bicolor* (Boiss.) Eig. and Feinbrun, *L. pyrotechnica* (Forssk.) Decne., *F. ferruginea* (L.), *V. tiberiadis* Boiss., *V. sinaiticum* Benth., *V. galilaicum* Boiss., *V. jordanicum* Murb., *V. gaillardotii* Boiss., *V. officinalis* L. and *V. luteola* (Jacq.) Benth. species. Additionally, the community has 23 (7.84%) endemic species, including the following endemic species: *R. palaestinus* Boiss., *P. palaestina* Boiss., *A. ramonensis* Danin, *P. syriaca* Boiss. and *T. palaestina* Bertol., accompanied by *C. arizonica* Greene and some *Cupressus* species. Forests grew in thermomediterranean–mesomediterranean thermotype regions and dry to humid environments in the soil of carbon substrates, such as brown ruisenas and light rendzina (terra rossa), with an almost neutral pH, and were habituated in the Mediterranean woodlands, shrub lands and relict maquis trees [16–19,52–62]. The slope was 10–30%, with a plant cover rate of 70%, an average altitude of 314 m and a vegetation height of 9–15 m (12 m) (Table 2). The distributions for life forms of this association are: 251 species, of which 96 (38.09 %) were phanerophytes trees (67), phanerophytes shrubs (15), phanerophytes shrub climbers (3), phanerophytes shrub vines (3), phanerophytes dwarf shrubs (3) and phanerophytes (5); 47 were shrubs, (18.65%) as shrubs (28), chamaephyte semi-shrubs (18)

and a chamaephyte shrub climber (1); 48 were chamaephytes (19.04%), as chamaephytes (46), a chamaephyte parasite (1) and a chamaephyte–hemicryptophyte–annual (1); 51 were hemicryptophytes (20.23%), as hemicryptophytes (51) and a hemicryptophyte climber (1); 5 were geophytes (1.98%), as geophytes (4) and a geophyte vine (1); and 3 were helophytes (1.19%) (Table 2).

Table 2. *Cupresso sempervirentis*–*Pinetum halepensis* ass. nova.

| Releve of Inventories | 1 | 2 | 8 | 11 | 12 | P | Status | Life Form | Family |
|---|-----|-----|-----|-----|-----|-----|--------|-------------|---------------|
| Surface in m² 1 = 10 | 450 | 600 | 500 | 550 | 400 | R | | | |
| Cover rate % | 75 | 65 | 70 | 80 | 60 | E | | | |
| Altitude in m. | 325 | 285 | 300 | 310 | 350 | S | | | |
| Average height of vegetation (m.) | 9 | 11 | 15 | 13 | 12 | N | | | |
| Slope % | 25 | 30 | 10 | 15 | 15 | C | | | |
| Orientation | E | N | S | W | N | I | | | |
| Order number | 1 | 2 | 8 | 11 | 12 | A | | | |
| Characteristic of association and higher units | | | | | | | | | |
| <i>Pinus halepensis</i> (L.) Miller | 5 | 4 | 2 | 2 | 1 | V | N | T | Pinaceae |
| <i>Cupressus sempervirens</i> L. | 4 | 4 | 2 | 2 | 2 | IV | N | T | Cupressaceae |
| <i>Pinus pinea</i> L. | 1 | 3 | | | 1 | Iv | N | T | Pinaceae |
| <i>Pinus canariensis</i> C. Smith | | 1 | | 1 | | I | N | T | Pinaceae |
| <i>Pinus brutia</i> Tenore | 1 | 1 | | 1 | | II | N | T | Cupressaceae |
| Companions | | | | | | | | | |
| <i>Cupressus arizonica</i> Greene | 3 | 3 | | 2 | 1 | Iv | N | T | Pinaceae |
| <i>Thuja occidentalis</i> L. | | 1 | | | | I | N | T | Cupressaceae |
| <i>Juniperus phoenicea</i> L. | 1 | 1 | 1 | 1 | | II | N | T | Cupressaceae |
| <i>Juniperus excelsa</i> M. Bieb. | | 1 | | 1 | | II | N | T | Cupressaceae |
| <i>Juniperus drupacea</i> Labill. | 1 | | 2 | | 1 | II | N | Phan. shrub | Cupressaceae |
| <i>Quercus calliprinos</i> Webb. <i>Quercus palaestina</i> K. | 1 | 1 | | 2 | 1 | Iv | N | T | Fagaceae |
| <i>Quercus look</i> Kotschy | | | | | | | E | T | Fagaceae |
| <i>Quercus inthaburensis</i> Decne. | 3 | 2 | | | | II | N | T | Fagaceae |
| <i>Quercus libani</i> G. Olivier | | | | | | | N | T | Fagaceae |
| <i>Quercus infectoria</i> Olivier | | 1 | | 2 | | II | N | T | Fagaceae |
| <i>Quercus boissieri</i> Reut. | | 1 | | | | I | N | T | Fagaceae |
| <i>Quercus cerris</i> L. | 1 | | | | | I | N | T | Fagaceae |
| <i>Arbutus unedo</i> L. | | | | | | | N | T | Ericaceae |
| <i>Pistacia lentiscus</i> L. | 2 | 1 | 1 | | 1 | III | N | T | Anacardiaceae |
| <i>Pistacia palaestina</i> Boiss. | | 1 | 1 | 1 | | II | E | T | Anacardiaceae |
| <i>Pistacia saportae</i> Burnat. | 1 | 1 | | 1 | | II | N | T | Anacardiaceae |
| <i>Pistacia atlantica</i> Desf. | 1 | 1 | | 1 | | II | N | T | Anacardiaceae |
| <i>Pistacia khinjuk</i> Stocks | | 1 | | 1 | | I | N | T | Anacardiaceae |
| <i>Schinus molle</i> L. | | 1 | | | | I | N | T | Anacardiaceae |
| <i>Rhus coriaria</i> L. | | | | | | | N | T | Anacardiaceae |
| <i>Schinus terebinthifolius</i> Raddi | | 1 | | | | I | N | T | Anacardiaceae |
| <i>Rhus tripartita</i> (Ucria) Grande | | | | | | | N | Phan. shrub | Anacardiaceae |
| <i>Rhamnus palaestinus</i> Boiss. | | 1 | 2 | 2 | 2 | III | E | Phan. | Rhamnaceae |
| <i>Rhamnus disperma</i> Ehrenb. ex Boiss | | | 2 | 1 | | III | N | Phan. | Rhamnaceae |
| <i>Rhamnus alaternus</i> L. | 1 | | 1 | 2 | 1 | III | N | T | Rhamnaceae |
| <i>Zizyphus Spina-christi</i> L. Desf. | | | 1 | | | I | N | T | Rhamnaceae |
| <i>Zizyphus Lotus</i> (L.) Lam. | | | | 1 | | I | N | Shrub | Rhamnaceae |
| <i>Paliurus spina-christi</i> Miller | | | 1 | 1 | | I | N | Shrub | Rhamnaceae |
| <i>Zizyphus jujuba</i> Miller | | 1 | | 1 | | I | N | Shrub | Rhamnaceae |
| <i>Sageretia thea</i> (Osbeck) M. C. Johnst. | | | | 1 | | I | N | Phan. | Rhamnaceae |
| <i>Mespilus germanica</i> L. | | | | 1 | | I | N | Shrub | Rosaceae |
| <i>Crataegus azarolus</i> L. | | | | | 1 | I | N | T | Rosaceae |
| <i>Amygdalus ramonensis</i> Danin | | | | 1 | | I | E | T | Rosaceae |
| <i>Prunus dulcis</i> (Mill.) D. A. Webb. | | 2 | 1 | 1 | 1 | III | N | T | Rosaceae |

Table 2. Cont.

| Releve of Inventories | 1 | 2 | 8 | 11 | 12 | P | Status | Life Form | Family |
|---|---|---|---|----|----|-----|--------|--------------------|-------------------------------|
| <i>Crataegus oriana</i> (L.) DC | | | 1 | | | I | N | Cham. | Rosaceae |
| <i>Sarcopoterium spinosum</i> (L.) Spach | | 1 | 1 | 1 | 1 | III | N | T | Rosaceae |
| <i>Pyrus syriaca</i> Boiss. | | | 1 | | | I | E | T | Rosaceae |
| <i>Crataegus monogyna</i> Jacq. | | | 1 | | | I | N | T | Rosaceae |
| <i>Malus communis</i> Desf. | | | | 1 | | I | N | Shrub | Rosaceae |
| <i>Pyracantha coccinea</i> M. Roem. | | | | 1 | | I | N | Shrub | Rosaceae |
| <i>Prunus ursina</i> Kotschy | | | 1 | 1 | | I | N | T | Rosaceae |
| <i>Prunus korshinskyi</i> Hand. Mazz. | | | | 1 | | I | N | Tree | Rosaceae |
| <i>Prunus arabica</i> (Olivier) Meikle. | | | | 1 | 1 | I | N | Phan. shrub | Rosaceae |
| <i>Rubus sanguineus</i> Friv. | | | | | | | N | Phan. shrub | Rosaceae |
| <i>Ceratonia siliqua</i> L. | 1 | 1 | 1 | 2 | | III | N | T | Fabaceae |
| <i>Spartium junceum</i> L. | | 1 | 1 | | | I | N | Shrub | Fabaceae |
| <i>Cersis siliquastrum</i> L. | | 1 | 1 | | | I | N | T | Fabaceae |
| <i>Glycyrrhiza glabra</i> L. | | | | | | | N | Phan. shrub | Fabaceae |
| <i>Acacia salicina</i> Lindl. | | | 1 | | | I | N | T | Fabaceae |
| <i>Acacia cyanophylla</i> Lindl. | | | 1 | | | I | N | T | Fabaceae |
| <i>Calicotome villosa</i> (Poir.) Link | | | 1 | 1 | | I | N | T | Fabaceae |
| <i>Retama raetam</i> (Forssk.) Webb. and Berthel. | 1 | | | | | I | N | Phan. shrub | Fabaceae |
| <i>Genista monspessulana</i> (L.) O. Bolós and Vigo. | | 1 | | | | I | N | T | Fabaceae |
| <i>Acacia dealbata</i> Link | | 1 | | | | I | N | T | Fabaceae |
| <i>Acacia radiana</i> Savi. | | 1 | | | | I | N | T | Fabaceae |
| <i>Ficus microcarpa</i> L.F. | | | 1 | 1 | | I | N | T | Mimosaceae |
| <i>Ficus sycomorus</i> L. | | + | | | | I | N | T | Mimosaceae |
| <i>Ficus cariaca</i> L. | 1 | 2 | 1 | 1 | | III | N | T | Mimosaceae |
| <i>Morus alba</i> L. | | | | 1 | | I | N | T | Mimosaceae |
| <i>Morus nigra</i> L. | | | 1 | 1 | | I | N | T | Mimosaceae |
| <i>Prosopis farcta</i> (Banks et Sol.) | | | | | | I | N | Cham., se-shrub | Mimosaceae |
| <i>Olea europaea</i> L. | | 1 | 1 | 1 | 1 | II | N | T | Oleaceae |
| <i>Phillyria media</i> L. | | | | 1 | | I | N | T | Oleaceae |
| <i>Olea oleaster</i> Hoffmanns. and Link | | | | 1 | | I | N | T | Oleaceae |
| <i>Olea europaea var. sylvestris</i> | | | | 1 | 1 | I | N | T | Oleaceae |
| <i>Salix alba</i> L. | | | 1 | | | I | N | T | Salicaceae |
| <i>Populus alba</i> L. | | | 1 | 1 | | I | N | T | Salicaceae |
| <i>Populus euphratica</i> Oliv. | | | 1 | 1 | | I | N | T | Salicaceae |
| <i>Tamarix aphylla</i> L. | | | | 1 | | I | N | T | Tamaricaceae |
| <i>Tamarix jordanis</i> Boiss. | | | | | | | E | T | Tamaricaceae |
| <i>Tamarix palaestina</i> Bertol. | | | 1 | | | I | E | T | Tamaricaceae |
| <i>Tamarix nilotica</i> (Ehrenb.) Bunge | | | | | | | N | T | Tamaricaceae |
| <i>Tamarix negevensis</i> Zohary | | | | | | | E | T | Tamaricaceae |
| <i>Tamarix parviflora</i> DC. | | | | | | | N | T | Tamaricaceae |
| <i>Tamarix tetragyna</i> Ehrenb. | | 1 | | | | I | N | T | Tamaricaceae |
| <i>Tamarix gennessarensis</i> Zohary | | | | | | | E | T | Tamaricaceae |
| <i>Reaumuria negevensis</i> Zohary and Danin | | 1 | 1 | | | I | E | T | Tamaricaceae |
| <i>Tamarix passerinoides</i> Delile | | | | | | | N | T | Tamaricaceae |
| <i>Tamarix senegalensis</i> DC. | | | | | | | N | T | Tamaricaceae |
| <i>Tamarix amplexicaulis</i> Ehrenb. | | | | | | | N | T | Tamaricaceae |
| <i>Acer obtusifolium</i> Sm. | | | | | | | E | T | Aceraceae |
| <i>Acer monspessulanum</i> L. | | | | 1 | | I | N | T | Aceraceae |
| <i>Polygonum palaestinum</i> Zohary | | 1 | | 1 | | I | E | Hem. | Polygonaceae |
| <i>Persicaria lanigera</i> (R.Br.) Sojak | | | | | | | N | Hem. | Polygonaceae |
| <i>Atraphaxis spinosa</i> L. | | | | 1 | | | N | Cham. | Polygonaceae |
| <i>Rheum palaestinum</i> Feinbrun | | 1 | | | 1 | II | E | Hem. | Polygonaceae |
| <i>Anagyris foetida</i> L. | | | | | | | N | Phan. shrub | Papilionaceae/ Leguminosae |

Table 2. Cont.

| Releve of Inventories | 1 | 2 | 8 | 11 | 12 | P | Status | Life Form | Family |
|---|---|---|---|----|----|-----|--------|-------------------|-------------------------------|
| <i>Colutea abyssinica</i> Kunth and Bouche | | | | | | | N | Phan. shrub | Papilionaceae/ Leguminosae |
| <i>Lycium barbarum</i> L. | | | 1 | 1 | | I | N | Shrub | Solanaceae |
| <i>Lycium europaeum</i> L. | | | | 1 | | I | N | Shrub | Solanaceae |
| <i>Nicotiana glauca</i> Graham. | | | | | | | N | T | Solanaceae |
| <i>Lycium depressum</i> Stocks | | | 1 | | | I | N | Phan. shrub | Solanaceae |
| <i>Lycium schweinfurthii</i> Dammer | | | | 1 | 1 | I | N | Phan. shrub | Solanaceae |
| <i>Lycium shawii</i> Roem. and Schult. | | | | 1 | 1 | I | N | Shrub | Solanaceae |
| <i>Solanum sinaicum</i> Boiss. | | | 1 | 1 | | I | N | Cham., s-shrub | Solanaceae |
| <i>Solanum incanum</i> L. | | | 1 | 1 | | I | N | Cham., s-shrub | Solanaceae |
| <i>Phlomis pungens</i> Willd. | 1 | | | 1 | | I | N | Cham., s-shrub | Lamiaceae |
| <i>Phlomis brachyodon</i> (Boiss.) Zohary | | | 1 | 1 | | I | N | Cham., s-shrub | Lamiaceae |
| <i>Phlomis chrysophylla</i> Boiss. | | | | | 1 | I | N | Cham., s-shrub | Lamiaceae |
| <i>Ballota saxatilis</i> Sieber ex. C. Presl | | | | | | | N | Shrub | Lamiaceae |
| <i>Ballota philistaea</i> Bornm. | | | 1 | | 1 | I | E | Shrub | Lamiaceae |
| <i>Ballota undulata</i> (Sieber ex Fresen.) Bentham | | | | | | | N | Shrub | Lamiaceae |
| <i>Bassia arabica</i> (Boiss.) Maire and Weiller | | | | 1 | | I | N | Shrub | Lamiaceae |
| <i>Phlomis platystegia</i> Post. | | | | | | | E | Cham., s-shrub | Lamiaceae |
| <i>Phlomis viscosa</i> Poiret. | 1 | | | | | I | N | Cham., s-shrub | Lamiaceae |
| <i>Salvia eigii</i> Zohay | | | | | | | E | Hem., cham. | Lamiaceae |
| <i>Salvia dominica</i> L. | | 1 | 1 | 1 | | II | N | Cham., s-shrub | Lamiaceae |
| <i>Salvia lanigera</i> Poir. | | 1 | 1 | 1 | | II | N | Cham., s-shrub | Lamiaceae |
| <i>Satureja thymbra</i> L. | 1 | 1 | 1 | 1 | | III | E | Cham., s-shrub | Lamiaceae |
| <i>Satureja thymbrifolia</i> Hedge and Feinbrun | | 1 | 1 | 1 | | II | E | Cham., s-shrub | Lamiaceae |
| <i>Stachys palaestina</i> L. | | 1 | 1 | 1 | | II | E | Cham., s-shrub | Lamiaceae |
| <i>Salvia fruticosa</i> Mill. | 1 | 1 | 1 | | | II | N | Cham. | Lamiaceae |
| <i>Salvia officinalis</i> L. | 1 | 1 | 1 | 1 | | III | N | Cham. | Lamiaceae |
| <i>Salvia aegyptiaca</i> L. | | 1 | 1 | | | II | N | Cham. | Lamiaceae |
| <i>Salvia palaestina</i> Benth. | 1 | | 1 | 1 | | II | E | Cham. | Lamiaceae |
| <i>Salvia aethiopsis</i> L. | | | | | | | N | Cham. | Lamiaceae |
| <i>Micromeria fruticosa</i> (L.) Druce. | | | 1 | 1 | | II | N | Cham. | Lamiaceae |
| <i>Teucrium capitatum</i> L. | 1 | 2 | 1 | 1 | | III | N | Cham. | Lamiaceae |
| <i>Teucrium creticum</i> L. | 2 | 1 | 1 | 1 | | III | N | Cham. | Lamiaceae |
| <i>Thymbra capitata</i> (L.) Cav. | | 1 | 1 | | | I | N | Cham. | Lamiaceae |
| <i>Thymbra spicata</i> L. | | | 1 | 1 | | I | N | Cham. | Lamiaceae |
| <i>Brachychiton populneus</i> (Schott and Endl.) R.Br. | | 1 | | | | I | N | T | Malvaceae |
| <i>Jacaranda mimosaeifolia</i> D. Don | | | | | | | N | T | Bignoniaceae |
| <i>Capparis spinosa</i> L. | | 1 | | | | I | N | Shrub | Capparaceae |
| <i>Capparis sicula</i> Duh. | | | 1 | | | I | N | Shrub | Capparaceae |
| <i>Capparis aegyptia</i> Lam. | | | 1 | | | I | N | Shrub | Capparaceae |
| <i>Celtis australis</i> L. | | | | | | | N | T | Ulmaceae |
| <i>Casuarina equisetifolia</i> L. | | | | | | | N | T | Casuarinaceae |
| <i>Atriplex halimus</i> L. | | | 1 | | | I | N | Shrub | Amaranthaceae |
| <i>Noaea mucronata</i> (Forssk.) Asch. and Schweinf. | | 1 | 1 | | | I | N | Shrub | Amaranthaceae |

Table 2. Cont.

| Releve of Inventories | 1 | 2 | 8 | 11 | 12 | P | Status | Life Form | Family | |
|--|---|---|---|----|----|---|--------|-----------|----------------------|-----------------|
| <i>Haloxylon persicum</i> Bunge | | 1 | 1 | 1 | | | II | N | Phan. shrub | Amaranthaceae |
| <i>Haloxylon negevensis</i> (Iljin and Zohary) L. Boulos | | | 1 | 1 | | | I | E | Shrub | Amaranthaceae |
| <i>Salicornia fruticosa</i> (L.) L. | 1 | | | | | | I | N | Shrub | Amaranthaceae |
| <i>Aerva javanica</i> (Burm.f.) Juss. ex Schult. | 1 | | | | | | I | N | Cham. | Amaranthaceae |
| <i>Salsola imbricata</i> Forssk. | | | | | | | N | | Phan. shrub | Amaranthaceae |
| <i>Salsola cyclophylla</i> Baker | | | | | | | N | | Shrub | Amaranthaceae |
| <i>Arthrocaulon macrostachyum</i> (Moric.) Piirainen and G. Kadereit | 1 | 1 | | | | | II | N | Cham. | Amaranthaceae |
| <i>Suaeda palaestina</i> Eig. and Zohary | 1 | 1 | | | | | II | E | Cham. | Amaranthaceae |
| <i>Halothammus lancifolius</i> (Boiss.) Kothe-Heinr. | 1 | 1 | | | | | II | N | Shrub | Amaranthaceae |
| <i>Haloxylon salicornicum</i> (Moq.) Bunge ex Boiss. | 1 | 1 | | | | | II | N | Cham. | Amaranthaceae |
| <i>Ononis natrix</i> L. | | | | | | | | N | Cham. | Fabaceae |
| <i>Arbutus andrachne</i> L. | | | | | | | | E | T | Ericaceae |
| <i>Laurus nobilis</i> L. | | 1 | | | | | I | N | T | Lauraceae |
| <i>Pteridium aquilinum</i> (L.) Kuhn | 1 | | | | | | I | N | Hem. | Hypolepidaceae |
| <i>Melia azedarach</i> L. | 1 | 1 | | | | | I | N | T | Meliaceae |
| <i>Paeonia mascula</i> (L.) Mill. | 1 | | | | | | I | N | Geo. | Paeoniaceae |
| <i>Azolla filiculoides</i> Lam. | | 1 | | | | | I | N | Hel. | Azollaceae |
| <i>Leptadenia pyrotechnica</i> (Forssk.) Decne. | 1 | | | | | | I | N | Phan. shrub | Asclepiadaceae |
| <i>Styrex officinalis</i> L. | | 1 | 1 | | | | I | N | Phan. shrub | Styracaceae |
| <i>Achillea aleppica</i> DC. | | 1 | 1 | 1 | | | I | N | Cham. | Compositae |
| <i>Gundelia tournefortii</i> L. | | 1 | | | | | I | N | Hem. | Compositae |
| <i>Artemisia arborescens</i> L. | | 1 | 1 | | | | I | N | Cham. | Compositae |
| <i>Artemisia monosperma</i> Delile | | | 1 | 1 | | | I | N | Cham. | Compositae |
| <i>Anvillea garcinii</i> (Burm.f.) DC. | | | 1 | | | | I | N | Cham. | Compositae |
| <i>Pluchea dioscoridis</i> (L.) DC. | | | 1 | | | | I | N | Phan. shrub | Compositae |
| <i>Artemisia sieberi</i> Besser | | | 1 | | | | I | N | Cham. | Compositae |
| <i>Asparagus horridus</i> L. | | | 1 | 1 | | | I | N | Geophyte | Liliaceae |
| <i>Asparagus palaestinus</i> Baker | | 1 | 1 | 1 | 1 | | III | E | V, geo | Liliaceae |
| <i>Smilax asperan</i> L. | | | 1 | | | | | N | Phan. shrub | Liliaceae |
| <i>Parkinsonia aculeata</i> L. | | | | | | | | N | Phan. shrub | Caesalpiniaceae |
| <i>Ochradenus baccatus</i> Delile | | | | | | | | N | Phan. shrub | Resedaceae |
| <i>Nerium oleander</i> L. | | | | | | | | N | Phan. shrub | Apocynaceae |
| <i>Cynanchum acutum</i> L. | | 1 | | | | | I | N | V, phan. shrub | Apocynaceae |
| <i>Periploca aphylla</i> Decne. | | | | | | | | N | Phan. shrub | Apocynaceae |
| <i>Moringa peregrina</i> (Forssk.) Fiori | | 1 | | | | | I | N | T | Moringaceae |
| <i>Grewia villosa</i> Willd | | 1 | | | | | I | N | Shrub | Tiliaceae |
| <i>Ephedra aphylla</i> Forskal | | 1 | | | | | I | N | V, phan. shrub | Ephedraceae |
| <i>Ephedra foeminea</i> Forssk | | 1 | | | | | I | N | V, phan. shrub | Ephedraceae |
| <i>Atriplex halimus</i> L. | | 1 | 1 | | | | I | N | Phan. shrub | Chenopodiaceae |
| <i>Anabasis setifera</i> Moq. | | 1 | 1 | | | | I | N | Cham. | Chenopodiaceae |
| <i>Anabasis syriaca</i> Iljin. | | | 1 | 1 | | | I | N | Cham. | Chenopodiaceae |
| <i>Alkanna orientalis</i> (L.) Boiss. | | 1 | 1 | | | | I | N | Cham. | Boraginaceae |
| <i>Alkanna strigosa</i> Boiss. and Hohen. | | 1 | 1 | | | | I | N | Cham. | Boraginaceae |
| <i>Alkanna galilaea</i> Boiss | | | | | | | | E | Cham. | Boraginaceae |
| <i>Alkanna tinctoria</i> (L.) Tausch | | 1 | 1 | | | | I | N | Cham. | Boraginaceae |
| <i>Ailanthus altissima</i> (Mill.) Swingle | | | 1 | 1 | | | I | N | Tree | Simarubaceae |
| <i>Rubia tinctorum</i> L. | | | | 1 | | | I | N | Phan. shrub, climber | Rubiaceae |

Table 2. Cont.

| Releve of Inventories | 1 | 2 | 8 | 11 | 12 | P | Status | Life Form | Family |
|--|---|---|---|----|----|----|--------|-------------------------|------------------|
| <i>Rubia tenuifolia</i> D'Urv. | | | | 1 | | I | N | Phan. shrub, climber | Rubiaceae |
| <i>Ruta chalepensis</i> L. | | | | 1 | | I | N | Cham. | Rutaceae |
| <i>Thymelaea hirsuta</i> (L.) Endl. | | | 1 | 1 | | I | N | Phan., dwarf shrub | Thymelaeaceae |
| <i>Verbascum eremobium</i> Murb. | | | 1 | 1 | 1 | II | E | Phan., dwarf shrub | Scrophulariaceae |
| <i>Verbascum fruticosum</i> Post. | | | 1 | 1 | 1 | II | N | Phan., dwarf Shrub | Scrophulariaceae |
| <i>Hedera helix</i> L. | | | 1 | | | I | N | Shrub | Araliaceae |
| <i>Erodium crassifolium</i> L'Her. | | | 1 | 1 | 1 | II | N | Hem. | Geraniaceae |
| <i>Erodium glaucophyllum</i> (L.) L'Hér. | | | 1 | 1 | | II | N | Hem. | Geraniaceae |
| <i>Erodium arborescens</i> (Desf.) Willd. | | | 1 | 1 | | II | N | Hem. | Geraniaceae |
| <i>Erodium acaule</i> (L.) Becherer and Thell. | 1 | | 1 | | 1 | II | N | Hem. | Geraniaceae |
| <i>Eryngium creticum</i> Lam. | | | 1 | 1 | 1 | II | N | Hem. | Apiaceae |
| <i>Eryngium falcatum</i> F. Delaroché | | | 1 | 1 | 1 | II | N | Hem. | Apiaceae |
| <i>Eryngium glomeratum</i> Lam. | | | 1 | 1 | 1 | II | N | Hem. | Apiaceae |
| <i>Eryngium maritimum</i> L. | | | 1 | 1 | 1 | II | N | Hem. | Apiaceae |
| <i>Eupatorium cannabinum</i> L. | | | 1 | 1 | 1 | II | N | Hem. | Compositae |
| <i>Euphorbia hierosolymitana</i> Boiss. | | | 1 | 1 | 1 | II | E | Shrub | Euphorbiaceae |
| <i>Euphorbia hirsuta</i> L. | | | 1 | 1 | 1 | II | N | Hem. | Euphorbiaceae |
| <i>Euphorbia terracina</i> L. | | | 1 | 1 | 1 | II | N | Hem. | Euphorbiaceae |
| <i>Balanites aegyptiaca</i> (L.) Delile | | | | 1 | | I | N | T | Zygophyllaceae |
| <i>Zygophyllum dumosum</i> Boiss. | | | | | 1 | I | N | Cham., s. shrub | Zygophyllaceae |
| <i>Nitraria retusa</i> (Forssk.) Ascherson | | | | | 1 | I | N | Phan. shrub | Zygophyllaceae |
| <i>Fagonia bruguieri</i> DC. | | | | | 1 | I | N | Shrub | Zygophyllaceae |
| <i>Fagonia mollis</i> Delile | | | | 1 | 1 | I | N | Shrub | Zygophyllaceae |
| <i>Fagonia orientalis</i> C. Presl | | | | 1 | 1 | I | N | Shrub | Zygophyllaceae |
| <i>Fagonia arabica</i> L. | | | | | 1 | I | N | Shrub | Zygophyllaceae |
| <i>Chenolea arabica</i> (Boiss.) Diagn. Pl. Orient | | | | | | N | N | Cham. | Chenopodiaceae |
| <i>Convolvulus lanatus</i> Vahl. | | | 1 | 1 | | I | N | Cham. | Convolvulaceae |
| <i>Citrullus colocynthis</i> (L.) Schrader | 1 | | 1 | | | I | N | Cham. | Cucurbitaceae |
| <i>Convolvulus dorycnium</i> L. | | 1 | 1 | | | I | N | Hem. | Convolvulaceae |
| <i>Ipomoea cairica</i> (L.) Sweet | | | 1 | | | I | N | Hem. | Convolvulaceae |
| <i>Ipomoea imperati</i> (Vahl.) Griseb. | | 1 | 1 | | | I | N | Hem. | Convolvulaceae |
| <i>Hyoscyamus aureus</i> L. | | 1 | 1 | | | I | N | Cham. | Solanaceae |
| <i>Podonosma orientalis</i> (L.) Feinbrun | | | 1 | 1 | | I | N | Cham. | Boraginaceae |
| <i>Micromeria myrtifolia</i> Boiss. et Hohen. | | | 1 | 1 | | I | N | Cham. | Lamiaceae |
| <i>Micromeria nervosa</i> (Desf.) Benth. | | | 1 | 1 | | I | N | Cham. | Lamiaceae |
| <i>Clinopodium insulare</i> (Candargy) Govaerts | | | 1 | 1 | | I | N | Cham. | Lamiaceae |
| <i>Eupatorium cannabinum</i> L. | | | 1 | | | I | N | Hem. | Compositae |
| <i>Doellia bovei</i> (DC.) Anderb. | | 1 | | 1 | | I | N | Cham. | Compositae |
| <i>Helichrysum sanguineum</i> (L.) Kostel. | | | 1 | 1 | | I | N | Hem. | Compositae |
| <i>Iphiona maris-mortui</i> Feinbrun | | | 1 | | | I | E | Cham. | Compositae |
| <i>Chiliadenus iphionoides</i> (Boiss. and Blanche) Brul. | | 1 | 1 | | | I | N | Cham. | Compositae |
| <i>Cota tinctoria</i> (L.) J. Gay | | | | | | | N | Hem. | Compositae |
| <i>Crepis hierosolymitana</i> Boiss | | | | | | | E | Cham. | Compositae |
| <i>Crepis reuteriana</i> Boiss. | | 1 | | | | I | N | Hem. | Compositae |
| <i>Cynara syriaca</i> Boiss. | | 1 | 1 | | | I | E | Hem. | Compositae |
| <i>Echinops philistaeus</i> Feinbrun and Zohary | 1 | 1 | 1 | | | II | E | Cham. | Compositae |
| <i>Vicia vilosa</i> Roth. | | 1 | 1 | | | I | N | Hem. | Papilionaceae |
| <i>Fumana thymifolia</i> (L.) Webb. | | | | | | | N | Shrub, cham. | Cistaceae |
| <i>Cistus creticus</i> L. | | | | | | | N | Shrub, cham. | Cistaceae |
| <i>Galium canum</i> Req. ex DC. | | 1 | 1 | | | I | N | Shrub, cham. | Rubiaceae |
| <i>Galium elongatum</i> C. Presl | | 1 | 1 | | | I | N | Hem. | Rubiaceae |

Table 2. Cont.

| Releve of Inventories | 1 | 2 | 8 | 11 | 12 | P | Status | Life Form | Family |
|--|---|---|---|----|----|---|--------|-------------------------|------------------|
| <i>Galium humifusum</i> M. Bieb. | | 1 | 1 | | | I | N | Hem. | Rubiaceae |
| <i>Cynanchum acutum</i> L. | | 1 | | 1 | | I | N | Phan. shrub, climber | Apocynaceae |
| <i>Echium glomeratum</i> Poir. | | 1 | | 2 | | I | N | Hem. | Boraginaceae |
| <i>Echiochilon fruticosum</i> Desf. | | | | 1 | | I | N | Cham. | Boraginaceae |
| <i>Echium angustifolium</i> Mill. | | | | 1 | | I | N | Cham. | Boraginaceae |
| <i>Heliotropium maris-mortui</i> Zohary | | | | | | | E | Shrub, cham. | Boraginaceae |
| <i>Podonosma orientalis</i> (L.) Feinbrun | | | | 1 | | I | N | Cham. | Boraginaceae |
| <i>Heliotropium bacciferum</i> Forssk. | | | 1 | 1 | | I | N | Sh, cham. | Boraginaceae |
| <i>Heliotropium arbainense</i> Fresen. | | | | | 1 | I | N | Shrub, cham. | Boraginaceae |
| <i>Moltkiopsis ciliata</i> (Forsk.) I. M. Johnston | 1 | | 1 | | | I | N | Cham. | Boraginaceae |
| <i>Heliotropium rotundifolium</i> Lehm | 1 | | 1 | | | I | N | Cham. | Boraginaceae |
| <i>Cynoglossum creticum</i> Mill. | | | 1 | | | I | N | Cham. | Boraginaceae |
| <i>Morettia canescens</i> Boiss | | | | | | | N | Cham. | Brassicaceae |
| <i>Najas marina</i> var. <i>Intermedia</i> (Wolfg. ex Gorski) Rendle | | | | | | | N | Helophyte | Hydrocharitaceae |
| <i>Deverra triradiata</i> | | | | | | | N | Cham. | Apiaceae |
| Hochst. Ex. Boiss. | | | | | | | | | |
| <i>Foeniculum vulgare</i> Miller | | | 1 | | | I | N | Hem. | Apiaceae |
| <i>Ferula biverticillata</i> J. Thieb. | | 1 | | | | I | N | Hem. | Apiaceae |
| <i>Ferula communis</i> L. | 1 | | | | | I | N | Hem. | Apiaceae |
| <i>Ferula orientalis</i> L. | 1 | | | | | I | E | Hem. | Apiaceae |
| <i>Ferula tingitana</i> L. | 1 | | | | | I | N | Hem. | Apiaceae |
| <i>Ferulago syriaca</i> Boiss. | 1 | | | | | I | N | Hem. | Apiaceae |
| <i>Conium maculatum</i> L. | | 1 | | | | I | N | Hem. | Apiaceae |
| <i>Fibigia clypeata</i> (L.) Medik | | 1 | | | | I | N | Hem. | Brassicaceae |
| <i>Fibigia eriocarpa</i> (DC.) Boiss. | | | 1 | | | I | N | Hem. | Brassicaceae |
| <i>Diplotaxis harra</i> (Forssk.) Boiss. | | 1 | | | | I | N | Cham., hem., annual | Brassicaceae |
| <i>Erysimum crassipes</i> Fisch. and C. A. Mey. | | | 1 | | | I | N | Hem. | Brassicaceae |
| <i>Fimbristylis bisumbellata</i> (Forssk.) Bubani | 1 | | | | | I | N | Helophyte | Cyperaceae |
| <i>Forsskaolea tenacissima</i> L. | | 1 | | | | I | N | Cham., Hem. | Urticaceae |
| <i>Viscum cruciatum</i> Sieber and Bioss. | | 1 | | | | I | N | Cham., parasite | Santalaceae |
| <i>Glaucium arabicum</i> Fresen. | | 1 | | | | I | N | Hem. | Papaveraceae |
| <i>Glaucium flavum</i> Crantz | | 1 | | | | I | N | Hem. | Papaveraceae |
| <i>Glaucium grandiflorum</i> Boiss. and A. Huet | 1 | | | | | I | N | Hem. | Papaveraceae |
| <i>Vitex agnus-castus</i> L. | | | | | | I | N | Cham., s-shrub | Verbenaceae |
| <i>Globularia arabica</i> Jaub. and Spach | | | | | | I | N | Cham., shrub | Plantaginaceae |
| <i>Hibiscus micranthus</i> L. | | | | | | I | N | Cham., shrub | Malvaceae |
| <i>Herniaria hemistemon</i> J. Gay | | 1 | | | | I | N | Hem. | Caryophyllaceae |
| <i>Hordeum bulbosum</i> L. | | 1 | 1 | | | I | N | Hem. | Poaceae |
| <i>Festuca arundinacea</i> Schreb | | 1 | 1 | | | I | N | Hem. | Poaceae |
| <i>Hypericum triquetrifolium</i> Turra | | 1 | 1 | | | I | N | Hem. | Hypericaceae |
| <i>Aristolochia parvifolia</i> Sm. | | | 1 | | | I | N | Hem. climber | Aristolochiaceae |
| <i>Iris atrofusca</i> Baker | | | | | | | E | Geo. | Iridaceae |
| <i>Iris atropurpurea</i> Baker | | | | | | | E | Geo. | Iridaceae |
| <i>Iris palaestina</i> (Baker) Boiss. | | 1 | | | | I | E | Geo. | Iridaceae |
| <i>Iris vartanii</i> Foster | | | | | | | E | Geo. | Iridaceae |
| <i>Gladiolus italicus</i> Mill. | | | | | | | N | Geo. | Iridaceae |
| <i>Juncus acutus</i> L. | | | | | | | N | Hem. | Juncaceae |
| <i>Juncus articulatus</i> L. | | | | | | | N | Hem. | Juncaceae |
| <i>Juncus subulatus</i> Forssk. | | | | | | | N | Hem. | Juncaceae |
| <i>Jacquemontia unilateralis</i> (Roem. and Schult.) O'Donell | 1 | | | | | I | N | Cham. | Convolvulaceae |
| <i>Kickxia aegyptiaca</i> (L.) Nabelek | | 1 | | | | I | N | Cham. | Plantaginaceae |

Table 2. Cont.

| Releve of Inventories | 1 | 2 | 8 | 11 | 12 | P | Status | Life Form | Family |
|---|---|---|---|----|----|----|--------|--------------------------|------------------|
| <i>Kickxia judaica</i> Danin | | | 1 | | | I | N | Cham. | Plantaginaceae |
| <i>Launaea nudicaulis</i> (L.) Hooker fil. | | | 1 | | | I | N | Hem. | Compositae |
| <i>Leontodon tuberosus</i> L. | | 1 | | | | I | N | Hem. | Compositae |
| <i>Leopoldia bicolor</i> (Boiss.) Eig. and Feinbrun | | | 1 | | | I | N | Geo. | Asparagaceae |
| <i>Leptadenia pyrotechnica</i> (Forssk.) Decne. | | | 1 | | | I | N | Phan. | Apocynaceae |
| <i>Fimbristylis ferruginea</i> (L.) | 1 | | | | | I | N | Helophyte | Cyperaceae |
| <i>Verbascum tiberiadis</i> Boiss. | | 1 | 1 | 1 | | II | N | Hem. | Scrophulariaceae |
| <i>Verbascum sinaiticum</i> Benth. | | 1 | 1 | 1 | | II | N | Hem. | Scrophulariaceae |
| <i>Verbascum galilaeum</i> Boiss. | | 1 | 1 | | 1 | II | N | Hem. | Scrophulariaceae |
| <i>Verbascum jordanicum</i> Murb. | | 1 | 1 | | 1 | II | N | Hem. | Scrophulariaceae |
| <i>Verbascum gaillardotii</i> Boiss. | | 1 | 1 | | 1 | II | N | Hem. | Scrophulariaceae |
| <i>Verbena officinalis</i> L. | | 1 | 1 | 1 | | II | N | Hem. | Verbenaceae |
| <i>Vigna luteola</i> (Jacq.) Benth. | | | | | 1 | I | N | Cham., s-sh., climber | Papilionaceae |
| <i>Clematis flammula</i> L. | | | | | | | N | V, phan. | Anunculaceae |
| <i>Clematis cirrhosa</i> L. | | | | | | | N | V, phan. | Anunculaceae |

Abbreviations: T, tree; Phan shrub, phanerophyte shrubs; Phan. shrub climber, phanerophyte shrub climber; Phan. shrub vine, phanerophyte shrub vine; Phan. vine, phanerophyte vine; Phan. dwarf shrubs, phanerophyte dwarf shrubs; Cham., chamaephyte; Cham. s.-shrubs, chamaephyte semi-shrubs; Sh, cham., chamaephyte shrublet; Cham., Shrub, chamaephyte shrubs; Cham. shrub climber, chamaephyte shrub climber; Cham.-hem., chamaephyte-hemicryptophyte; Cham., p., chamaephyte parasite; Cham., hem., annual, chamaephyte-hemicryptophyte-annual; Hem., hemicryptophyte; Hem. climber, hemicryptophyte climber; Geo., geophyte; Geo. vine, geophyte vine; and Hel., helophyte.

These give us an indication that suggests that association one lies in the Asian regions of the Eastern Mediterranean, and thermomediterranean to mesomediterranean thermotypes: *Cupressus sempervirentis*—*Pinetum halepensis* ass. nova. (Figure 2C; Table 2: ASL 1- Inv. 1, 2, 8, 11 and 12, typus inv. 1).

Percentage of plant species present in the sample studies and communities: V = 100%, IV = 60.1–80%, III = 40.1–60%, II = 20.1–40% and I = 0.1–20%. N: native, E: endemic, Sh: shrub, ASL: association and ASL2: association 2.

3.2. Forest Maquis, Macchie and Steppe Vegetation

3.2.1. *Pistacio lentisci*–*Quercetum calliprini* ass. nova

The second association consisted of the forest group (inventories 3, 4, 6, 7, 9, 10 and 5), represented by *Quercus* genus as *Q. calliprinos* Webb. (*Q. palaestina* K., Oak Palestine) [63,64], *Q. inthaburensis* Decne., *Q. infectoria* Olivier, *Q. boissieri* Reut. and *Q. cerris* L. Additionally, in May 2018 several new varieties of oak were identified, including *Q. suber* L., *Q. ilex* L. and *Q. robur* L., in addition to common oak species, when the geographic information system (GIS) platform technology was used in various areas of occupied Palestine in 1948 by Ezra Barnea [65]. *Rhamnus* and *Pistachio* genus, as species of *P. lentiscus* L., *R. palaestinus* Boiss. (*R. lycioides* L.), *R. alaternus* L., *Z. Spina-christi* L. Desf. and *Z. Lotus* (L.) Lam., are heavy forest plains with 37 endemic plants (12.75%), including: *R. palaestinus* Boiss., *P. palaestina* Boiss, *Q. look* Kotschy, *A. andrachne* L., *B. philistaea* Bornm., *A. obtusifolium* Sm., *T. palaestina* Bertol. and *A. ramonensis* Danin, accompanied by *R. palaestinus* Boiss., *C. siliqua* L. and others *Quercus* species. The forest or community is in steppe environments that are part of a large area of uneven flat grassland in Southeast Europe and the western Mediterranean, with dry and semi-arid areas and an inframediterranean to thermomediterranean thermotype [16–19]. The slope is 5–25%, with an average vegetation height of 8.5 m, an average altitude of 272.8 m and a soil type of limestone and terra rosa. The distributions of life forms for this association are: 113 (38.96%) phanerophytes (trees), 109 (37.58%) shrubs and chamaephytes, 55 (17.93%) hemicryptophytes, 9 (2.94%) geophytes and 4 (1.30%) helophytes. This suggested to us that the association is *Pistacio lentisci*–*Quercetum calliprini* ass. nova. hoc loco. (Figure 2C,D; Table 3: ASL 2- Inv. 3, 4, 6, 7, 9, 10 and 5).

Table 3. Association 2. *Pistacio lentisci*—*Quercetum calliprini* ass. nova.

| Releve of Inventories | 3 | 4 | 5 | 6 | 7 | 9 | 10 | P | Status | Life Form | Family |
|---|-----|-----|-----|-----|-----|-----|-----|-----|--------|-------------|---------------|
| Surface in m² 1 = 10 | 390 | 350 | 320 | 550 | 400 | 300 | 300 | R | | | |
| Cover rate % | 75 | 70 | 85 | 80 | 60 | 75 | 80 | E | | | |
| Altitude in m. | 275 | 270 | 260 | 310 | 350 | 370 | 300 | S | | | |
| Average height of vegetation (m.) | 6 | 5.5 | 5 | 13 | 12 | 10 | 8 | N | | | |
| Slope % | 25 | 20 | 15 | 10 | 5 | 10 | 20 | C | | | |
| Orientation | N | E | N | E | W | E | W | I | | | |
| Order number | 3 | 4 | 5 | 6 | 7 | 9 | 10 | A | | | |
| Characteristic of association and higher units | | | | | | | | | | | |
| <i>Pistacia lentiscus</i> L. | 4 | 2 | 2 | 3 | 3 | 3 | 2 | V | N | T | Anacardiaceae |
| <i>Quercus calliprinos</i> Webb. (<i>Quercus Palaestina</i> K.) | 5 | 3 | 4 | 3 | 3 | 3 | 2 | V | N | T | Fagaceae |
| <i>Quercus inthaburensis</i> Decne. | 3 | 2 | | 1 | 1 | | 2 | IV | N | T | Fagaceae |
| <i>Quercus infectoria</i> Olivier | 3 | 3 | | 1 | | 2 | 2 | IV | N | T | Fagaceae |
| <i>Pistacia palaestina</i> Boiss. | 1 | | 1 | 2 | | 2 | 2 | IV | E | T | Anacardiaceae |
| <i>Pistacia saportae</i> Burnat. | 1 | 2 | | 2 | | | 2 | III | N | T | Anacardiaceae |
| Companions | | | | | | | | | | | |
| <i>Rhamnus palaestinus</i> Boiss. | 4 | 3 | | 3 | | 2 | 2 | IV | E | Phan. | Rhamnaceae |
| <i>Rhamnus disperma</i> Ehrenb.ex Boiss. | | | 2 | | 2 | | 2 | III | N | Phan. | Rhamnaceae |
| <i>Rhamnus alaternus</i> L. | | 2 | 2 | | 2 | | 2 | III | N | T | Rhamnaceae |
| <i>Ceratonia siliqua</i> L. | 3 | 2 | 2 | | 2 | 2 | 2 | IV | N | T | Fabaceae |
| <i>Quercus look</i> Kotschy | | 1 | | | | | | I | E | T | Fagaceae |
| <i>Quercus libani</i> G. Olivier | | 1 | | | | | | I | N | T | Fagaceae |
| <i>Quercus boissieri</i> Reut. | | 1 | | | | | | I | N | T | Fagaceae |
| <i>Quercus cerris</i> L. | 1 | | | | | | | I | N | T | Fagaceae |
| <i>Pistacia atlantica</i> Desf. | 1 | 2 | | 2 | | 2 | | III | N | T | Anacardiaceae |
| <i>Pistacia khinjuk</i> Stocks | | 1 | | | | | | I | N | T | Anacardiaceae |
| <i>Schinus molle</i> L. | | 1 | | | | | | I | N | T | Anacardiaceae |
| <i>Rhus coriaria</i> L. | | | | | | | | I | N | T | Anacardiaceae |
| <i>Schinus terebinthifolius</i> Raddi | | 1 | | | | | | I | N | T | Anacardiaceae |
| <i>Rhus tripartita</i> (Ucria) Grande | | | | | | 1 | | I | N | Phan. shrub | Anacardiaceae |
| <i>Zizyphus Spina-christi</i> L. Desf. | | | | | | 1 | | I | N | T | Rhamnaceae |
| <i>Zizyphus Lotus</i> (L.) Lam. | | | | | | 1 | | I | N | Shrub | Rhamnaceae |
| <i>Paliurus spina-christi</i> Miller | | | | | | 1 | | I | N | Shrub | Rhamnaceae |
| <i>Zizyphus jujuba</i> Miller | | | | 2 | | | | I | N | Shrub | Rhamnaceae |
| <i>Searsia tripartita</i> (Ucria) Moffett | | | | | 1 | | | I | N | Phan. | Rhamnaceae |
| <i>Sageretia thea</i> (Osbeck) M. C. Johnst. | | | | | | | | I | N | Phan. | Rhamnaceae |
| <i>Arbutus unedo</i> L. | | | | 1 | | | | I | N | T | Ericaceae |
| <i>Mespilus germanica</i> L. | | | | | | | | I | N | Shrub | Rosaceae |
| <i>Crataegus azarolus</i> L. | | | | 1 | | | 1 | I | N | T | Rosaceae |
| <i>Amygdalus ramonensis</i> Danin | | | 2 | 2 | | 2 | 2 | III | E | T | Rosaceae |
| <i>Prunus dulcis</i> (Mill.) D. A. Webb. | | | 2 | 2 | | 2 | 2 | III | N | T | Rosaceae |
| <i>Crataegus oriana</i> (L.) DC | | | | | 1 | 1 | | I | N | T | Rosaceae |
| <i>Sarcopoterium spinosum</i> (L.) Spach | | | 2 | 2 | 2 | 2 | | III | N | Cham. | Rosaceae |
| <i>Pyrus syriac</i> Boiss. | | | | | 1 | 1 | | I | E | T | Rosaceae |
| <i>Crataegus monogyna</i> Jacq. | | | | | 1 | 1 | | I | N | T | Rosaceae |
| <i>Malus communis</i> Desf. | | | | 1 | | 1 | | I | N | Shrub | Rosaceae |
| <i>Pyracantha coccinea</i> M. Roem. | | | | | | 1 | | I | N | Shrub | Rosaceae |
| <i>Prunus ursina</i> Kotschy | | | | 1 | | | | I | N | T | Rosaceae |
| <i>Prunus korshinskyi</i> Hand. Mazz. | | | | | | 1 | | I | N | Tree | Rosaceae |
| <i>Prunus arabica</i> (Olivier) Meikle. | | | | | | 1 | | I | N | Phan. shrub | Rosaceae |
| <i>Rubus sanguineus</i> Friv. | | | | | | 1 | | I | N | Phan. shrub | Rosaceae |
| <i>Pinus halepensis</i> (L.) Miller | | | 1 | | 1 | | | I | N | T | Pinaceae |
| <i>Cupressus sempervirens</i> L. | | | | | 2 | | | I | N | T | Cupressaceae |
| <i>Pinus Pinea</i> L. | 1 | | | | 1 | | | I | N | T | Pinaceae |
| <i>Pinus canariensis</i> C. Smith | | 1 | | 1 | | | | I | N | T | Pinaceae |
| <i>Pinus brutia</i> Tenore | 1 | 1 | | 1 | | | | I | N | T | Cupressaceae |
| <i>Cupressus arizonica</i> Greene | | | | | 1 | | | I | N | T | Pinaceae |

Table 3. Cont.

| Releve of Inventories | 3 | 4 | 5 | 6 | 7 | 9 | 10 | P | Status | Life Form | Family |
|--|---|---|---|---|---|---|----|-----|--------|--------------------|-------------------------------|
| <i>Thuja occidentalis</i> L. | | 1 | | | | | | I | N | T | Cupressaceae |
| <i>Juniperus phoenicea</i> L. | 1 | | | | | | | I | N | T | Cupressaceae |
| <i>Juniperus excelsa</i> M. Bieb. | | 1 | | 1 | | | | I | N | T | Cupressaceae |
| <i>Juniperus drupacea</i> Labill. | 1 | | | | 1 | | | I | N | Phan. shrub | Cupressaceae |
| <i>Spartium junceum</i> L. | | | | | 1 | | | I | N | Shrub | Fabaceae |
| <i>Cersis siliquastrum</i> L. | | | | | | 1 | | I | N | T | Fabaceae |
| <i>Glycyrrhiza glabra</i> L. | | | | | | | 1 | I | N | Phan. shrub | Fabaceae |
| <i>Acacia salicina</i> Lindl. | | | | | | | 1 | I | N | T | Fabaceae |
| <i>Acacia cyanophylla</i> Lindl. | | | | | | | 1 | I | N | T | Fabaceae |
| <i>Calicotome villosa</i> (Poir.) Link | | | | | | | | I | N | T | Fabaceae |
| <i>Retama raetam</i> (Forssk.) Webb and Berthel. | | | | | 1 | 1 | | I | N | Phan. shrub | Fabaceae |
| <i>Genista monspessulana</i> (L.) O. Bolós and Vigo. | | | | | 1 | | | I | N | T | Fabaceae |
| <i>Acacia dealbata</i> Link | | | | | 1 | 1 | | I | N | T | Fabaceae |
| <i>Retama rhodorhizoides</i> (Webb. and Berthel.) | | | | | 1 | 1 | | I | N | T | Fabaceae |
| <i>Acacia radiana</i> Savi. | | | 1 | 1 | | | | I | N | T | Fabaceae |
| <i>Ficus microcarpa</i> L.F. | | | 1 | 1 | 1 | | | I | N | T | Mimosaceae |
| <i>Ficus sycomorus</i> L. | | | | | | | | I | N | T | Mimosaceae |
| <i>Ficus cariaca</i> L. | | 2 | 1 | 1 | 1 | | | III | N | T | Mimosaceae |
| <i>Ficus benjamina</i> L. | | | 1 | | | | | I | N | T | Mimosaceae |
| <i>Morus alba</i> L. | | | 1 | 1 | | | | I | N | T | Mimosaceae |
| <i>Morus nigra</i> L. | | | 1 | | | | | I | N | T | Mimosaceae |
| <i>Prosopis farcta</i> (Banks et Sol.) | | 1 | 1 | | | | | I | N | Cham., se-shrub | Mimosaceae |
| <i>Olea europaea</i> L. | | 1 | 1 | 1 | | | | III | N | T | Oleaceae |
| <i>Phillyria media</i> L. | | | 1 | | | | | I | N | T | Oleaceae |
| <i>Olea oleaster</i> Hoffmanns. and Link | | | 1 | | | | | I | N | T | Oleaceae |
| <i>Olea europaea var. sylvestris</i> | | | | 1 | | 1 | | I | N | T | Oleaceae |
| <i>Phillyrea latifolia</i> L. | | | | | 1 | | | I | N | T | Oleaceae |
| <i>Salix alba</i> L. | | | | 1 | | | | I | N | T | Salicaceae |
| <i>Populus alba</i> L. | | | | 1 | | | | I | N | T | Salicaceae |
| <i>Populus euphratica</i> Oliv. | | | | 1 | | | | I | N | T | Salicaceae |
| <i>Tamarix articulata</i> Vahl. | | | | | 1 | | | I | N | T | Tamaricaceae |
| <i>Tamarix aphylla</i> L. | | | | 1 | | 1 | | I | N | T | Tamaricaceae |
| <i>Tamarix jordanis</i> Boiss. | | | | 1 | | | | I | E | T | Tamaricaceae |
| <i>Tamarix palaestina</i> Bertol. | | | | 1 | 1 | | | I | E | T | Tamaricaceae |
| <i>Tamarix nilotica</i> (Ehrenb.) Bunge | | | | 1 | | | | I | N | T | Tamaricaceae |
| <i>Tamarix negevensis</i> Zohary | | | 1 | 1 | | | | I | E | T | Tamaricaceae |
| <i>Tamarix parviflora</i> DC. | | | | 1 | | | | I | N | T | Tamaricaceae |
| <i>Tamarix tetragyna</i> Ehrenb. | | | | | 1 | | | I | N | T | Tamaricaceae |
| <i>Tamarix gennessarensis</i> Zohary | | | | 1 | | | | I | E | T | Tamaricaceae |
| <i>Reaumuria negevensis</i> Zohary and Danin | | | | 1 | | | | I | E | T | Tamaricaceae |
| <i>Tamarix passerinoides</i> Delile | | | | | 1 | | | I | N | T | Tamaricaceae |
| <i>Tamarix senegalensis</i> DC. | | | | | 1 | | | I | N | T | Tamaricaceae |
| <i>Tamarix amplexicaulis</i> Ehrenb. | | | | 1 | | | | I | N | T | Tamaricaceae |
| <i>Acer obtusifolium</i> Sm. | | | 1 | 1 | 1 | | | III | E | T | Aceraceae |
| <i>Acer monspessulanum</i> L. | | | | 1 | | | | I | N | T | Aceraceae |
| <i>Polygonum palaestinum</i> Zohary | | | | 1 | 1 | | | I | E | Hem. | Polygonaceae |
| <i>Persicaria lanigera</i> (R.Br.) Sojak | | | | 1 | | | | I | N | Hem. | Polygonaceae |
| <i>Atraphaxis spinosa</i> L. | | | | | 1 | | | I | N | Cham. | Polygonaceae |
| <i>Rheum palaestinum</i> Feinbrun | | | 1 | | 1 | | | I | E | Hem. | Polygonaceae |
| <i>Anagyris foetida</i> L. | | | | | 1 | | | I | N | Phan. shrub | Papilionaceae/ Leguminosae |
| <i>Colutea abyssinica</i> Kunth and Bouche | | | | | | 1 | | I | N | Phan. shrub | Papilionaceae/ Leguminosae |
| <i>Lycium barbarum</i> L. | | | | | 1 | | | I | N | Shrub | Solanaceae |
| <i>Lycium europaeum</i> L. | | | | | | 1 | | I | N | Shrub | Solanaceae |
| <i>Nicotiana glauca</i> Graham | | | | 1 | 1 | | | I | N | T | Solanaceae |
| <i>Lycium depressum</i> Stocks | | | | 1 | 1 | | | I | N | Phan. shrub | Solanaceae |

Table 3. Cont.

| Releve of Inventories | 3 | 4 | 5 | 6 | 7 | 9 | 10 | P | Status | Life Form | Family |
|---|---|---|---|---|---|---|----|-----|--------|-------------------|---------------|
| <i>Lycium schweinfurthii</i> Dammer | | | | 1 | 1 | | | I | N | Phan. shrub | Solanaceae |
| <i>Lycium shawii</i> Roem. and Schult. | | | 1 | | 1 | | | I | N | Shrub | Solanaceae |
| <i>Solanum sinaicum</i> Boiss. | | | | 1 | 1 | 1 | | III | N | Cham., s-shrub | Solanaceae |
| <i>Solanum incanum</i> L. | | | | | 1 | 1 | | I | N | Cham., s-shrub | Solanaceae |
| <i>Phlomis pungens</i> Willd. | | | | | 1 | 1 | | I | N | Cham., s-shrub | Lamiaceae |
| <i>Phlomis brachyodon</i> (Boiss.) Zohary | | | | | 1 | 1 | | I | N | Cham., s-shrub | Lamiaceae |
| <i>Phlomis chrysophylla</i> Boiss. | | | | 1 | 1 | | | I | N | Cham., s-shrub | Lamiaceae |
| <i>Ballota saxatilis</i> Sieber exC.Presl | | | | 1 | | | | I | N | Shrub | Lamiaceae |
| <i>Ballota philistaea</i> Bornm. | | | | | 1 | | | I | E | Shrub | Lamiaceae |
| <i>Ballota undulata</i> (Sieber ex Fresen.) Benth | | | | | | 1 | | I | N | Shrub | Lamiaceae |
| <i>Bassia arabica</i> (Boiss.) Maire and Weiller | | | | | 1 | | | I | N | Shrub | Lamiaceae |
| <i>Phlomis platystegia</i> Post. | | | 1 | 1 | | | | I | E | Cham., s-shrub | Lamiaceae |
| <i>Phlomis viscosa</i> Poiret. | | | 1 | 1 | | | | I | N | Cham., s-shrub | Lamiaceae |
| <i>Salvia eigii</i> Zohay | | | 1 | | | 1 | | I | E | Cham. | Lamiaceae |
| <i>Salvia dominica</i> L. | 1 | | 1 | 1 | 1 | | | III | N | Cham., s-shrub | Lamiaceae |
| <i>Salvia lanigera</i> Poir. | | 1 | 1 | 1 | 1 | | | III | N | Cham., s-shrub | Lamiaceae |
| <i>Satureja thymbra</i> L. | | | | | 1 | | | I | E | Cham., s-shrub | Lamiaceae |
| <i>Satureja thymbrifolia</i> Hedge and Feinbrun | | | | 1 | | | | I | E | Cham., s-shrub | Lamiaceae |
| <i>Stachys palaestina</i> L. | | | 1 | | 1 | | 1 | III | E | Cham., s-shrub | Lamiaceae |
| <i>Salvia fruticosa</i> Mill. | 1 | 1 | | 1 | 1 | | | III | N | Cham. | Lamiaceae |
| <i>Salvia officinalis</i> L. | 1 | 1 | | 1 | 1 | | | III | N | Cham. | Lamiaceae |
| <i>Salvia aegyptiaca</i> L. | 1 | | | | | | | I | N | Cham. | Lamiaceae |
| <i>Salvia palaestina</i> Benth. | 1 | 1 | | 1 | 1 | | | III | E | Cham. | Lamiaceae |
| <i>Salvia aethiopsis</i> L. | 1 | 1 | | 1 | 1 | | | III | N | Cham. | Lamiaceae |
| <i>Micromeria fruticosa</i> (L.) Druce. | 1 | 1 | | 1 | 1 | | | III | N | Cham. | Lamiaceae |
| <i>Teucrium capitatum</i> L. | | | | | | | | I | N | Cham. | Lamiaceae |
| <i>Teucrium creticum</i> L. | | | | 1 | | | | I | N | Cham. | Lamiaceae |
| <i>Thymbra capitata</i> (L.) Cav. | | | | 1 | | | | I | N | Cham. | Cham. |
| <i>Thymbra spicata</i> L. | | | | 1 | | | | I | N | Cham. | Lamiaceae |
| <i>Brachychiton populneus</i> (Schott and Endl.) R. Br. | | | | 1 | | | | I | N | T | Malvaceae |
| <i>Jacaranda mimosaefolia</i> D. Don. | | | | 1 | | | | I | N | T | Bignoniaceae |
| <i>Capparis spinosa</i> L. | | | | 1 | 1 | | | I | N | Shrub | Capparaceae |
| <i>Capparis sicula</i> Duh. | | | | | 1 | | | I | N | Shrub | Capparaceae |
| <i>Capparis aegyptia</i> Lam. | | | | | | 1 | | I | N | Shrub | Capparaceae |
| <i>Celtis australis</i> L. | | | | | | 1 | | I | N | T | Ulmaceae |
| <i>Casuarina equisetifolia</i> L. | | | | | | 1 | | I | N | T | Casuarinaceae |
| <i>Juglans regia</i> L. | | | | | 1 | | | I | N | T | Juglandaceae |
| <i>Atriplex halimus</i> L. | | | | | 1 | | | I | N | Shrub | Amaranthaceae |
| <i>Noaea mucronata</i> (Forssk.) Asch. and Schweinf. | | | | | 1 | | | I | N | Shrub | Amaranthaceae |
| <i>Haloxylon persicum</i> Bunge | | | | 1 | 1 | 1 | | III | N | Phan. shrub | Amaranthaceae |
| <i>Haloxylon negevensis</i> (Iljin and Zohary) L. Boulos | | | | | | 1 | 1 | I | E | Shrub | Amaranthaceae |
| <i>Salicornia fruticosa</i> (L.) L. | | | | | | 1 | | I | N | Shrub | Amaranthaceae |
| <i>Aerva javanica</i> (Burm.f.) Juss. ex Schult. | | | | | 1 | | | I | N | Cham. | Amaranthaceae |
| <i>Salsola imbricata</i> Forssk. | | | | | | 1 | | I | N | Phan. shrub | Amaranthaceae |
| <i>Salsola cyclophylla</i> Baker | | | | | 1 | 1 | | I | N | Shrub | Amaranthaceae |
| <i>Arthrocaulon macrostachyum</i> (Moric.) Piirainen and G. Kadereit | | | | | 1 | | | I | N | Cham. | Amaranthaceae |

Table 3. Cont.

| Releve of Inventories | 3 | 4 | 5 | 6 | 7 | 9 | 10 | P | Status | Life Form | Family |
|--|---|---|---|---|---|---|----|-----|--------|-------------------------|---------------------------|
| <i>Suaeda palaestina</i> Eig. and Zohary | | | | | 1 | 1 | | I | E | Cham. | Amaranthaceae |
| <i>Halothamnus lancifolius</i> (Boiss.) Kothe-Heinr. | | | | | 1 | 1 | | I | N | Shrub | Amaranthaceae |
| <i>Haloxylon salicornicum</i> (Moq.) Bunge ex Boiss. | | | | | 1 | 1 | | I | N | Cham. | Amaranthaceae |
| <i>Ononis natrix</i> L. | | 1 | | 1 | | | | I | N | Cham. | Fabaceae |
| <i>Arbutus andrachne</i> L. | 1 | 1 | | 1 | | | | III | E | T | Ericaceae |
| <i>Laurus nobilis</i> L. | | | | 1 | | | | I | N | T | Lauraceae |
| <i>Pteridium aquilinum</i> (L.) Kuhn | | | | 1 | | | | I | N | Hem. | Hypolepidaceae |
| <i>Melia azedarach</i> L. | | | | 1 | | | | I | N | T | Meliaceae |
| <i>Paeonia mascula</i> (L.) Miller | | | | 1 | | | | I | N | Geophyte | Paeoniaceae |
| <i>Azolla filiculoides</i> Lam. | | | | 1 | | | | I | N | Helophyte | Azollaceae |
| <i>Leptadenia pyrotechnica</i> (Forssk.) Decne. | | | | | | | 1 | I | N | Phan. shrub | Asclepiadaceae |
| <i>Styrex officinalis</i> L. | | | | | 1 | 1 | | I | N | Phan. shrub | Styracaceae |
| <i>Achillea aleppica</i> DC. | 1 | | | 1 | 1 | 1 | | III | N | Cham. | Compositae/ Asteraceae |
| <i>Gundelia tournefortii</i> L. | | | | | | | | I | N | Hem. | Compositae/ Asteraceae |
| <i>Artemisia arborescens</i> L. | | | 1 | | | 1 | | I | N | Cham. | Compositae/ Asteraceae |
| <i>Artemisia monosperma</i> Delile | | | | 1 | | 1 | | I | N | Cham. | Compositae/ Asteraceae |
| <i>Anvillea garcinii</i> (Burm.f.) DC. | | | | 1 | | | | I | N | Cham. | Compositae/ Asteraceae |
| <i>Pluchea dioscoridis</i> (L.) DC. | | | | | 1 | | | I | N | Phan. shrub | Compositae/ Asteraceae |
| <i>Artemisia sieberi</i> Besser | | | 1 | 1 | | 1 | | III | N | Cham. | Compositae/ Asteraceae |
| <i>Asparagus horridus</i> L. | | | 1 | 1 | | | | I | N | Geophyte | Liliaceae |
| <i>Asparagus palaestinus</i> Baker | | | 1 | 1 | 1 | | | III | E | V, geo | Liliaceae |
| <i>Smilax asperan</i> L. | | 1 | | | | | | I | N | Phan. shrub | Liliaceae |
| <i>Parkinsonia aculeata</i> L. | | 1 | 1 | | | | | I | N | Phan. shrub | Caesalpinaceae |
| <i>Ochradenus baccatus</i> Delile | | 1 | 1 | | | | | I | N | Phan. shrub | Resedaceae |
| <i>Nerium oleander</i> L. | 1 | | 1 | | | | | I | N | Phan. shrub | Apocynaceae |
| <i>Cynanchum acutum</i> L. | 1 | | 1 | | | | | I | N | V, phan. shrub | Apocynaceae |
| <i>Periploca aphylla</i> Decne. | 1 | | | 1 | | | | I | N | Phan. shrub | Apocynaceae |
| <i>Moringa peregrina</i> (Forssk.) Fiori | 1 | | | | | | | I | N | T | Moringaceae |
| <i>Grewia villosa</i> Willd | 1 | | | 1 | | | | I | N | Shrub | Tiliaceae |
| <i>Ephedra aphylla</i> Forskal | | 1 | | 1 | | | | I | N | V, phan. shrub | Ephedraceae |
| <i>Ephedra foeminea</i> Forssk | | | 1 | | | | | I | N | V, phan. shrub | Ephedraceae |
| <i>Atriplex halimus</i> L. | | | | | | | | I | N | Phan. shrub | Chenopodiaceae |
| <i>Anabasis setifera</i> Moq. | | | 1 | | 1 | | | I | N | Cham. | Chenopodiaceae |
| <i>Anabasis syriaca</i> Iljin | | | 1 | 1 | | | | I | N | Cham. | Chenopodiaceae |
| <i>Alkanna orientalis</i> (L.) Boiss | | | | 1 | | | | I | N | Cham. | Boraginaceae |
| <i>Alkanna strigosa</i> Boiss. and Hohen. | | | 1 | 1 | | | | I | N | Cham. | Boraginaceae |
| <i>Alkanna galilaea</i> Boiss. | | | 1 | | | | | I | E | Cham. | Boraginaceae |
| <i>Alkanna tinctoria</i> (L.) Tausch | | | | 1 | | | | I | N | Cham. | Boraginaceae |
| <i>Ailanthus altissima</i> (Mill.) Swingle | | | | | 1 | | | I | N | Tree | Simarubaceae |
| <i>Rubia tinctorum</i> L. | | | | | 1 | | | I | N | Phan. shrub, climber | Rubiaceae |
| <i>Rubia tenuifolia</i> D'Urv. | | | | | 1 | | | I | N | Phan. shrub, climber | Rubiaceae |
| <i>Ruta chalepensis</i> L. | | | | | 1 | | | I | N | Cham. | Rutaceae |
| <i>Thymelaea hirsuta</i> (L.) Endl. | | | 1 | 1 | | | | I | N | Phan., dwarf shrub | Thymelaeaceae |
| <i>Verbascum eremobium</i> Murb. | | | | 1 | 1 | 1 | | III | E | Phan., dwarf shrub | Scrophulariaceae |

Table 3. Cont.

| Releve of Inventories | 3 | 4 | 5 | 6 | 7 | 9 | 10 | P | Status | Life Form | Family |
|---|---|---|---|---|---|---|----|-----|--------|-----------------------|-------------------------------|
| <i>Verbascum fruticosum</i> Post. | | | | 1 | 1 | 1 | | III | N | Phan., dwarf shrub | Scrophulariaceae |
| <i>Hedera helix</i> L. | | | | 1 | 1 | | | I | N | Shrub | Araliaceae |
| <i>Erodium crassifolium</i> L'Her. | | | | | 1 | | | I | N | Hem. | Geraniaceae |
| <i>Erodium glaucophyllum</i> (L.) L'Hér. | | | | | 1 | | | I | N | Hem. | Geraniaceae |
| <i>Erodium arborescens</i> (Desf.) Willd. | | | | 1 | 1 | 1 | | III | N | Hem. | Geraniaceae |
| <i>Erodium acaule</i> (L.) Becherer and Thell. | | | | 1 | 1 | | | I | N | Hem. | Geraniaceae |
| <i>Eryngium creticum</i> Lam. | | | | 1 | | | | I | N | Hem. | Apiaceae |
| <i>Eryngium falcatum</i> F. Delaroché | | | | 1 | | | | I | N | Hem. | Apiaceae |
| <i>Eryngium glomeratum</i> Lam. | | | | 1 | | | | I | N | Hem. | Apiaceae |
| <i>Eryngium maritimum</i> L. | | | | | 1 | | | I | N | Hem. | Apiaceae |
| <i>Eupatorium cannabinum</i> L. | | | | | 1 | | | I | N | Hem. | Compositae |
| <i>Euphorbia hierosolymitana</i> Boiss. | | | | 1 | 1 | | | I | E | Shrub | Euphorbiaceae |
| <i>Euphorbia hirta</i> L. | | | 1 | 1 | | | | I | N | Shrub | Euphorbiaceae |
| <i>Euphorbia hirsuta</i> L. | | | 1 | 1 | | | | I | N | Hem. | Euphorbiaceae |
| <i>Euphorbia terracina</i> L. | | | | 1 | 1 | | | I | N | Hem. | Euphorbiaceae |
| <i>Balanites aegyptiaca</i> (L.) Delile | | | | 1 | 1 | | | I | N | T | Zygophyllaceae |
| <i>Zygophyllum dumosum</i> Boiss. | | | | 1 | | | | I | N | Cham., s.-shrub | Zygophyllaceae |
| <i>Nitraria retusa</i> (Forssk.) Ascherson | | | | 1 | | | | I | N | Phan. shrub | Zygophyllaceae |
| <i>Fagonia bruguieri</i> DC. | | | | 1 | | | | I | N | Shrub | Zygophyllaceae |
| <i>Fagonia mollis</i> Delile | | | | | 1 | | | I | N | Shrub | Zygophyllaceae |
| <i>Fagonia orientalis</i> C. Presl | | | | 1 | 1 | | | I | N | Shrub | Zygophyllaceae |
| <i>Fagonia arabica</i> L. | | | | | 1 | | | I | N | Shrub | Zygophyllaceae |
| <i>Chenolea arabica</i> (Boiss.) Diagn. Pl. Orient | | | | | 1 | | | I | N | Cham. | Chenopodiaceae |
| <i>Convolvulus lanatus</i> Vahl | | | | | 1 | | | I | N | Cham. | Convolvulaceae |
| <i>Citrullus colocynthis</i> (L.) Schrader | | | | | 1 | | | I | N | Cham. | Cucurbitaceae |
| <i>Convolvulus dorycnium</i> L. | | | | | 1 | | | I | N | Hem. | Convolvulaceae |
| <i>Ipomoea cairica</i> (L.) Sweet. | | | | | 1 | | | I | N | Hem. | Convolvulaceae |
| <i>Ipomoea imperati</i> (Vahl.) Griseb. | | | | | 1 | | | I | N | Hem. | Convolvulaceae |
| <i>Hyoscyamus aureus</i> L. | | | | | 1 | | | I | N | Cham. | Solanaceae |
| <i>Podonosma orientalis</i> (L.) Feinbrun | | | | | 1 | | | I | N | Cham. | Boraginaceae |
| <i>Micromeria myrtifolia</i> Boiss. et Hohen. | | | | 1 | 1 | 1 | | III | N | Cham. | Lamiaceae |
| <i>Micromeria nervosa</i> (Desf.) Benth. | | | | 1 | 1 | 1 | | III | N | Cham. | Lamiaceae |
| <i>Clinopodium insulare</i> (Candargy) Govaerts | | | | | | | | I | N | Cham. | Lamiaceae |
| <i>Eupatorium cannabinum</i> L. | | | | 1 | | | | I | N | Hem. | Compositae/ Asteraceae |
| <i>Doellia bovei</i> (DC.) Anderb. | | | | | 1 | | | I | N | Cham. | Compositae/ Asteraceae |
| <i>Helichrysum sanguineum</i> (L.) Kostel. | | | | 1 | 1 | | | I | N | Hem. | Compositae/ Asteraceae |
| <i>Iphiaea maris-mortui</i> Feinbrun | | | | 1 | 1 | | | I | E | Cham. | Compositae/ Asteraceae |
| <i>Chiliadenus iphionoides</i> (Boiss. and Blanche) Brul. | | | | | | | | I | N | Cham. | Compositae/ Asteraceae |
| <i>Cota tinctoria</i> (L.) J. Gay | | | | 1 | 1 | | | I | N | Hem. | Compositae/ Asteraceae |
| <i>Crepis hierosolymitana</i> Boiss | | | | 1 | | | | I | N/E | Cham. | Compositae/ Asteraceae |
| <i>Crepis reuteriana</i> Boiss. | | | | 1 | | | | I | N | Hem. | Compositae/ Asteraceae |
| <i>Cynara syriaca</i> Boiss. | | | | 1 | 1 | | | I | E | Hem. | Compositae/ Asteraceae |
| <i>Echinops philistaeus</i> Feinbrun and Zohary | | | | 1 | 1 | 1 | | III | E | Cham. | Compositae/ Asteraceae |
| <i>Vicia vilosa</i> Roth. | | 1 | | | | | | I | N | Hem. | Leguminosae/ Papilionaceae |

Table 3. Cont.

| Releve of Inventories | 3 | 4 | 5 | 6 | 7 | 9 | 10 | P | Status | Life Form | Family |
|--|---|---|---|---|---|---|----|----|--------|---------------------------|------------------|
| <i>Fumana thymifolia</i> (L.) Webb. | 1 | | | | 1 | | | I | N | Shrub, cham. | Cistaceae |
| <i>Cistus creticus</i> L. | | | | 1 | 1 | | | I | N | Shrub, cham. | Cistaceae |
| <i>Galium canum</i> Req. ex DC. | | | | | | | | I | N | Shrub, cham. | Rubiaceae |
| <i>Galium elongatum</i> C. Presl | | | | | 1 | | | I | N | Hem. | Rubiaceae |
| <i>Galium humifusum</i> M. Bieb. | | | | | 1 | | | I | N | Hem. | Rubiaceae |
| <i>Cynanchum acutum</i> L. | | | | 1 | | | | I | N | Phan. shrub, climber | Apocynaceae |
| <i>Echium glomeratum</i> Poir. | | | | 1 | 1 | | | I | N | Hem. | Boraginaceae |
| <i>Echiochilon fruticosum</i> Desf. | | | 1 | 1 | 1 | | | II | N | Cham. | Boraginaceae |
| <i>Echium angustifolium</i> Mill. | | | 1 | | | | | I | N | Cham. | Boraginaceae |
| <i>Heliotropium maris-mortui</i> Zohary | | | 1 | | | | | I | E | Shrub, cham. | Boraginaceae |
| <i>Podonosma orientalis</i> (L.) Feinbrun | | | 1 | 1 | | | | I | N | Cham. | Boraginaceae |
| <i>Heliotropium bacciferum</i> Forssk. | | | 1 | 1 | | | | I | N | Shrub, cham. | Boraginaceae |
| <i>Heliotropium arbainense</i> Fresen. | | | 1 | 1 | | | | I | N | Shrub, cham. | Boraginaceae |
| <i>Moltkiopsis ciliata</i> (Forskal) I. M. Johnston | | | | 1 | | | | I | N | Cham. | Boraginaceae |
| <i>Heliotropium rotundifolium</i> Lehm. | | | | | 1 | | | I | N | Cham. | Boraginaceae |
| <i>Cynoglossum creticum</i> Mill. | | | | 1 | 1 | | | I | N | Cham. | Boraginaceae |
| <i>Morettia canescens</i> Boiss. | | | | 1 | 1 | | | I | N | Cham. | Brassicaceae |
| <i>Najas marina</i> var. <i>intermedia</i> (Wolfg. ex Gorski) Rendle | | | | 1 | | | | I | N | Hel. | Hydrocharitaceae |
| <i>Deverra triradiata</i> Hochst. Ex. Boiss. | | | | | 1 | | | I | N | Cham. | Apiaceae |
| <i>Foeniculum vulgare</i> Miller | | | | | 1 | | | I | N | Hem. | Apiaceae |
| <i>Ferula biverticillata</i> J. Thieb | | | 1 | 1 | | | | I | N | Hem. | Apiaceae |
| <i>Ferula communis</i> L. | | | 1 | 1 | | | | I | N | Hem. | Apiaceae |
| <i>Ferula orientalis</i> L. | | | 1 | 1 | | | | I | E | Hem. | Apiaceae |
| <i>Ferula tingitana</i> L. | | | | 1 | 1 | | | I | N | Hem. | Apiaceae |
| <i>Ferulago syriaca</i> Boiss. | | | | | 1 | | | I | N | Hem. | Apiaceae |
| <i>Conium maculatum</i> L. | | | | | | | 1 | I | N | Hem. | Apiaceae |
| <i>Fibigia clypeata</i> (L.) Medik | | | | | | | 1 | I | N | Hem. | Brassicaceae |
| <i>Fibigia eriocarpa</i> (DC.) Boiss. | | | | | | | 1 | I | N | Hem. | Brassicaceae |
| <i>Diplotaxis harra</i> (Forssk.) Boiss. | | | | | 1 | 1 | | I | N | Cham., hem., annual | Brassicaceae |
| <i>Erysimum crassipes</i> Fisch. and C. A. Mey. | | | | | 1 | 1 | | I | N | Hem. | Brassicaceae |
| <i>Fimbristylis bisumbellata</i> (Forssk.) Bubani | | | | | 1 | | | I | N | Helophyte | Cyperaceae |
| <i>Forsskaolea tenacissima</i> L. | | | | 1 | | | | I | N | Cham., hem. | Urticaceae |
| <i>Viscum cruciatum</i> Sieber ex. Boiss. | | | | | 1 | | | I | N | Cham., p. | Santalaceae |
| <i>Glaucium arabicum</i> Fresen. | | | | | 1 | 1 | | I | N | Hem. | Papaveraceae |
| <i>Glaucium flavum</i> Crantz | | | | | 1 | 1 | | I | N | Hem. | Papaveraceae |
| <i>Glaucium grandiflorum</i> Boiss. and A. Huet. | | | | 1 | 1 | | | I | N | Hem. | Papaveraceae |
| <i>Vitex agnus-castus</i> L. | | | 1 | | 1 | | | I | N | Cham., s-shrub | Verbenaceae |
| <i>Globularia arabica</i> Jaub. and Spach | | | 1 | | 1 | | | I | N | Cham., shrub | Plantaginaceae |
| <i>Hibiscus micranthus</i> L. | | | | | | | | I | N | Cham., shrub | Malvaceae |
| <i>Herniaria hemistemon</i> J. Gay | | | 1 | 1 | | | | I | N | Hem. | Caryophyllaceae |
| <i>Hordeum bulbosum</i> L. | | | | 1 | 1 | | | II | N | Hem. | Poaceae |
| <i>Festuca arundinacea</i> Schreb | | | | 1 | 1 | | | I | N | Hem. | Poaceae |
| <i>Hypericum triquetrifolium</i> Turra | | | | 1 | | | | I | N | Hem. | Hypericaceae |
| <i>Aristolochia parvifolia</i> Sm. | | | | 1 | | 1 | | I | N | Hem. climber | Aristolochiaceae |
| <i>Iris atrofusca</i> Baker | | | | | | | | I | E | Geo. | Iridaceae |

Table 3. Cont.

| Releve of Inventories | 3 | 4 | 5 | 6 | 7 | 9 | 10 | P | Status | Life Form | Family |
|---|---|---|---|---|---|---|----|-----|--------|--------------------------|--------------------------------|
| <i>Iris atropurpurea</i> Baker | | | | 1 | | | | I | E | Geo. | Iridaceae |
| <i>Iris palaestina</i> (Bak.) Boiss. | | 1 | 1 | 1 | 1 | | | III | E | Geo. | Iridaceae |
| <i>Iris vartanii</i> Foster | | | 1 | | | | | I | E | Geo. | Iridaceae |
| <i>Gladiolus italicus</i> Mill. | | | 1 | | | | | I | N | Geo. | Iridaceae |
| <i>Juncus acutus</i> L. | | | 1 | | | | | I | N | Hem. | Juncaceae |
| <i>Juncus articulatus</i> L. | | | | 1 | | | | I | N | Hem. | Juncaceae |
| <i>Juncus subulatus</i> Forssk. | | | | | 1 | | | I | N | Hem. | Juncaceae |
| <i>Jacquemontia unilateralis</i> (Roem. and Schult.) O'Donell | | | | | | | 1 | I | N | Cham. | Convolvulaceae |
| <i>Kickxia aegyptiaca</i> (L.) Nabelek | | | | | | | 1 | I | N | Cham. | Plantaginaceae |
| <i>Kickxia judaica</i> Danin | | | | | | | 1 | I | E | Cham. | Plantaginaceae |
| <i>Launaea nudicaulis</i> (L.) Hooker fil. | | | | | 1 | | | I | N | Hem. | Compositae |
| <i>Leontodon tuberosus</i> L. | | | | | 1 | 1 | | I | N | Hem. | Compositae |
| <i>Leopoldia bicolor</i> (Boiss.) Eig. and Feinbrun | | | | | 1 | 1 | | I | N | Geo. | Asparagaceae |
| <i>Leptadenia pyrotechnica</i> (Forssk.) Decne. | | | | | 1 | | | I | N | Phan. | Apocynaceae |
| <i>Fimbristylis ferruginea</i> (L.) | | | | | 1 | 1 | | I | N | Hel. | Cyperaceae |
| <i>Verbascum tiberiadis</i> Boiss. | | | | | 1 | 1 | | I | N | Hem. | Scrophulariaceae |
| <i>Verbascum sinaiticum</i> Benth. | | | 1 | 1 | 1 | | | II | N | Hem. | Scrophulariaceae |
| <i>Verbascum galilaeum</i> Boiss. | | | 1 | 1 | 1 | | | II | N | Hem. | Scrophulariaceae |
| <i>Verbascum jordanicum</i> Murb. | | | 1 | 1 | 1 | | | II | N | Hem. | Scrophulariaceae |
| <i>Verbascum gaillardotii</i> Boiss. | | | 1 | 1 | 1 | | | II | N | Hem. | Scrophulariaceae |
| <i>Verbena officinalis</i> L. | | 1 | | 1 | 1 | 1 | | III | N | Hem. | Verbenaceae |
| <i>Vigna luteola</i> (Jacq.) Benth. | | | | | 1 | 1 | | I | N | Cham., s-sh., climber | Leguminosae/ Papilionaceae |
| <i>Clematis flammula</i> L. | | | | | | 1 | | I | N | Phan., v. | Anunculaceae/ Ranunculaceae |
| <i>Clematis cirrhosa</i> L. | | | | | | 1 | | I | N | Phan., v. | Anunculaceae/ Ranunculaceae |

Abbreviations: T, tree; Phan shrub, phanerophyte shrub; Phan shrub climber, phanerophyte shrub climber; Phan. shrub vine, phanerophyte shrub vine; Phan. vine, phanerophyte vine; Phan. dwarf shrubs, phanerophyte dwarf shrubs; Cham., chamaephyte; Cham. semi-shrubs, chamaephyte semi-shrubs; Sh, cham., chamaephyte shrublet; Cham., Shrub, chamaephyte shrubs; Cham. shrubs climber, chamaephyte shrubs climber; Cham., hem, chamaephyte hemicryptophyte; Cham., p., chamaephyte parasite; Cham., hem., annual, chamaephyte-hemicryptophyte-annual; Hem., hemicryptophyte; Hem. climber, hemicryptophyte climber; Geo., geophyte; Geo. vine, geophyte vine; and Hel.: helophyte. Percentage of plant species present in the sample studies and communities: V = 100%, IV = 60.1–80%, III = 40.1–60%, II = 20.1–40% and I = 0.1–20%. N: native, E: endemic, Sh: shrub, ASL: association and ASL2: association 2.

The main forests are found in the various mountains and highlands of Palestine, stretching from the heights of the Hebron Mountains in the south to Ras Al-Naqoura, Galilee and Safed in the north. In most of these areas cultivated plants have replaced natural plants for several centuries.

These results show that the study area lies within the region between the Mediterranean Sea and West Asia, and botanists divide Palestinian flora into eight distinct groups, which are: Mediterranean, Eurasia, Euro-Siberian, Irano-Turanian, Sudano-Zambesian, Saharo-Arabian, Americas, Australia and South Africa, as well as plants that grow in Palestine [16,63,64].

Furthermore, the great difference between the pine forests of *Pinus halepensis* Miller of the western Mediterranean with those existing in Palestine allows us to propose the new alliance *Cupresso sempervirentis–Pinus halepensis*, with an eastern Mediterranean distribution and dry thermomediterranean environments. As a typus of the *Cupresso sempervirentis–Pinus halepensis* alliance we chose the association *Cupresso sempervirentis–Pinetum halepensis* ass. nova. The alliance was characterized by *P. pinea* L., *P. brutia* Tenore, *C. sempervirens* L. *C. arizonica* Greene, *T. occidentalis* L., *J. phoenicea* L., *J. excelsa* M. Bieb. and *J. drupacea* Labill. [66–68].

The syntaxonomical interpretation of these associations is shown below:

1. Forest vegetation:
 Class: *Quercetea ilicis* Br.-Bl. ex. A. and O. Bolòs 1950 [69].
 Order: *Pinetalia halepensis* Biondi, Blasi, Galdenzi, Pesaresi et Vagge in Biondi et al. [27] (2014).
 Alliance: *Cupresso sempervirentis*—*Pinus halepensis* all. nova.
 Typus of alliance: Ass. *Cupresso sempervirentis*—*Pinetum halepensis* ass. nova.
2. Maquis, macchie and steppe vegetation:
 Class: *Quercetea calliprini* or *palaestini* nova.
 Order: *Quercetalia calliprini* Zohary [64] 1960.
 Alliance: *Querco*—*Pistacion lentisci* all. nova.
 Association: *Pistacio lentisci*—*Quercetum calliprini* ass. nova.

Moreover, forests of pines are found on different geological formations in the world, including in the Mediterranean, Europe and different regions in the Palestine mountains. *P. halepensis* Miller, *P. pinea* L., *P. canariensis* C. Smith, *P. brutia* Tenore and *Cupressus* genus as *C. sempervirens* L., *C. arizonica* Greene, *T. occidentalis* L., *J. phoenicea* L., *J. excelsa* M. Bieb. and *J. drupacea* Labill, *C. equisetifolia* L., *C. sempervirentis* and *P. halepensis* associations have been described by many researchers in antecedent studies [16–19]. Phytogeographically, plant associations belonging to the forest flora that extend over Europe, the Mediterranean and from the north to the south of Palestine were included within the classes of *Quercetea ilicis* [69]. Pine and *Cupressus* forests are placed under two different alliances: the order *Pinetalia halepensis*, Biondi et al. 2014 [27], and the alliance *Juniperon phoeniceae*—*Pinus acutisquamae* and *Quercetea ilicis* [65]. The components of the alliance of the *Pinus halepensis* [64] order of *Pinetalia halepensis* [27] are apparent in this association due to the range of anthropogenic harm to the forest steppes and mountain zones as a result of some military activities for the purpose of training and fire, in addition to the existence of numerous plants that return to this association.

3.2.2. *Pistacio lentisci*—*Quercetum calliprini* ass. nova

The second association includes represented inventories (3, 4, 6, 7, 9, 10 and 5) of the principal component analysis in (Table 3, typus inv. 1); the community grows in areas of the Beit Jibrin in the dry, infra- and thermotropical thermotypes. This association is a composition of *Q. calliprinos* Webb. (Oak Palestine, *Q. palaestina* Kotschy), *Q. inthaburensis* Decne., *Q. infectoria* Olivier, *Q. boissieri* Reut., *Q. cerris* L., *A. obtusifolium* Smith, *A. monspessulanum* L., *Q. libani* G. Olivier, *Q. look* Kotschy, *Q. boissieri* Reut., and *P. lentiscus* L. *P. palaestina* Boiss., accompanied with *R. palaestinus* Boiss., *R. disperma* Ehrenb. ex Boiss., *R. alaternus* L., *C. siliqua* L. and *P. khinjuk* Stocks species, and it belongs to Mediterranean macchie vegetation, evergreen Mediterranean forests and deciduous Mediterranean forests. The soil of this association has a partially basic character, low organic matter and a medium of clayey–loamy texture. Due to the high degradation, numerous steppes and xerophilous species permeated into the floristic structure of this association. *Quercus* as Oak extends from the eumediterranean and submediterranean regions (*Quercetalia ilicis*), according to a Braun-Blanquet rating [69–73], and many *Quercus* species, such as *Q. calliprinos* Webb., *Q. inthaburensis* Decne., *Q. infectoria* Olivier, *Q. libani* G. Olivier, *Q. look* Kotschy and *Q. boissieri* Reut. associations were qualified in neighboring regions and studied. Likewise, the *Quercus* genus association described in Palestine in the highland mountains and west of Hebron [16–19] was categorized under the *Quercetalia calliprini* order. The floristic structure of this association is well-specified by the characteristic species of the order *Quercetalia calliprini* [63] and a new class, *Quercetea calliprini* or *palaestini*. For these causes, the association must be included in the syntax unity aforementioned. However, the second association is dominated by *Q. calliprinos* Webb. (*Q. palaestina* Kotschy or *Q. coccifera* L.), *Q. inthaburensis* Decne., *Q. infectoria* Olivier, *Q. boissieri* Reut., *Q. cerris* L., *Q. look* Kotschy, *Q. libani* G. Olivier, *C. siliqua* L., *S. junceum* L., *C. siliquastrum* L., *P. gillesii* Hook, *A. salicina* Lindl., *A. cyanophylla* Lindl., *C. equisetifolia* L., *S. japonica* L., *C. villosa* (Poir.) Link, *R. raetam* (Forssk.) Webb. and Berthel., *G. monspessulana* (L.) O. Bolós and Vigo., *A. radiana* Savi., *P. palaestina* Boiss., *P. khinjuk* Stocks, *P. lentiscus*

L., *P. saportae* Burnat., *P. atlantica* Desf., *P. terebinthus* L., *P. vera* L., *S. molle* L., *R. coriaria* L., *R. palaestinus* Boiss., (*R. lycioides* L.), *R. alaternus* L., *Z. Spina-christi* L. Desf., *Z. Lotus* (L.) Lam., *P. spina-christi* Miller, *Z. jujuba* Miller, *S. tripartita* (Ucria) Moffett, *S. thea* (Osbeck) M.C. Johnst., *M. germanica* L., *C. azarolus* L., *A. communis* L., *C. oriana* (L.) DC., *S. spinosum* (L.) Spach, *P. syriaca* Boiss., *C. monogyna* Jacq., *M. communis* Desf., *P. coccinea* M. Roem., *P. spinosa* L., *F. retusa* L., *F. sycomorus* L., *F. carriaca* L., *M. alba* L., *M. nigara* L., *O. europaea* L., *P. media* L., *O. oleaster* Hoffmanns. and Link, *A. obtusifolium* Sm. or *A. syrisicum* Boiss., *A. monspessulanum* L., *F. retusa* L., *F. sycomorus* L., *F. carriaca* L., *M. alba* L., *M. nigara* L., *O. ficus-indica* (L.) Miller, *O. robusta* J.C. Wendl., *O. ficus-barbarica* A. Berger, *S. alba* L., *P. alba* L., *P. nigra* L., *P. euphratica* Oliver, etc.

Forest oaks and maquis evergreen vegetation, such as *Q. calliprinos* Webb. (*Q. palaestina* K.), *Q. inthaburensis* Decne, *Q. infectoria* Olivier, *Q. boissieri* Reut., *Q. cerris* L., *P. palaestina* Boiss., *R. coriaria* L., *C. siliqua* L., *S. junceum* L., *P. gillesii* Hook, *A. salicina* Lindl., *A. cyanophylla* Lindl., *S. japonica* L., *R. raetam* (Forssk.) Webb. and Berthel., *G. monspessulana* (L.) O. Bolós and Vigo, *A. radiana* Savi. and *O. europaea* L., a forest growing in a granular climate community in a habitat, include Mediterranean scrubs, steppes, grasslands, desert oases, urban areas, forest and canyons environments with dry sub-humid regions and an infrared thermal Mediterranean pattern to the mesomediterranean, on limestone composed of grain skeletal fragment organisms and organic matter. Therefore, the floristic arrangement of this association (*Ceratonia* and *Quercus* species) in the Mediterranean and Middle East regions extends from the eumediterranean to the Eurasian regions (*Quercetalia ilicis*), corresponding to its Braun-Blanquet rating [69–73]. Several *Quercus* and *Ceratonia* species, such as *Q. look* Kotschy, *Q. boissieri* Reut., *Q. calliprinos* (*Q. coccifera* L. or *Q. palaestina* K.), *C. siliqua* L. [74], *S. junceum* L., *P. gillesii* Hook, *A. salicina* Lindl., *A. cyanophylla* Lindl., *R. raetam* (Forssk.) Webb. and Berthel. and *A. radiana* Savi. associations were discovered in neighboring regions and studied [16,17]. In the same way, the *Quercus* and *Ceratonia* species, such as the *Q. look* Kotschy and *C. siliqua* L. associations described in Southern Palestine, as well as to the west of the Hebron area by Ighbareyeh et al. [16], were proposed a new classification under the *Quercetalia calliprini* order and *Quercetalia lentisci* alliance. Consequently, the floristic makeup of this association is well-identified by the specific species of the *Quercetalia calliprini* order and the *Quercetalia calliprini* or *palaestini* class; for these causes, the association must be included in the syntaxa unity mentioned. Furthermore, we suggested a new alliance (*Quercetalia–Pistacia lentisci*), order (*Quercetalia calliprini*) [64] and class (*Quercetalia calliprini* or *Quercetalia palaestini*), in addition to the *Quercetalia ilicis* order. The following are diagnostic class species (subordinated units) and vascular plants: *Q. calliprinos* Webb. (*Q. palaestina* K.), *Q. inthaburensis* Decne., *Q. infectoria* Olivier, *Q. boissieri* Reut., *Q. cerris* L., *Q. look* Kotschy, *Q. libani* G. Olivier, *C. siliqua* L., *S. junceum* L., *C. siliquastrum* L., *P. gillesii* Hook, *A. salicina* Lindl., *A. cyanophylla* Lindl., *S. japonica* L., *C. villosa* (Poir.) Link, *R. raetam* (Forssk.) Webb. and Berthel., *G. monspessulana* (L.) O. Bolós and Vigo, *A. radiana* Savi., *P. palaestina* Boiss., *P. khinjuk* Stocks, *P. lentiscus* L., *P. saportae* Burnat., *P. atlantica* Desf., *P. terebinthus* L., *P. vera* L., *S. molle* L., *R. coriaria* L., *R. palaestinus* Boiss. (*R. lycioides* L.), *R. alaternus* L., *Z. Spina-christi* L. Desf., *Z. Lotus* (L.) Lam., *P. spina-christi* Miller, *Z. jujuba* Miller, *S. tripartita* (Ucria) Moffett, *S. thea* (Osbeck) M.C. Johnst., *M. germanica* L., *C. azarolus* L., *A. communis* L., *C. oriana* (L.) DC., *S. spinosum* (L.) Spach, *P. syriaca* Boiss., *C. monogyna* Jacq., *M. communis* Desf., *P. coccinea* M. Roem., *P. spinosa* L., *F. retusa* L., *F. sycomorus* L., *F. carriaca* L., *F. benjamina* L., *M. alba* L., *M. nigara* L., *O. europaea* L., *P. media* L., *O. oleaster* Hoffmanns. and Link, *A. obtusifolium* Sm. or *A. syrisicum* Boiss., *A. monspessulanum* L., *P. halepensis* Miller, *P. P. L.*, *P. canariensis* C. Smith, *P. brutia* Tenor, *C. sempervirens* L., *C. sempervirens* L. var. *horizontalis* Miller, *C. arizonica* Greene, *T. occidentalis* L., *J. phoenicea* L., *J. excelsa* M. Bieb., *J. drupacea* Labill., *A. monspessulanum* L., *F. retusa* L., *F. sycomorus* L., *F. carriaca* L., *M. alba* L., *M. nigara* L., *O. ficus indica* (L.) Miller, *O. robusta* J.C. Wendl., *O. ficus-barbarica* A. Berger, *S. alba* L., *P. alba* L., *P. nigra* L., *P. euphratica* Oliver, etc.

On the other hand, for the flora and vegetation, we found more than 72 families and 800 species of plants including forest oak, maquis, woodland, scrub evergreen, macchie and

steppe land *Quercus* species, such as *Q. calliprinos* Webb. (*Q. palaestina* k., *Q. inthaburensis* Decne., *Q. infectoria* Olivier, *Q. cerris* L., etc., and the *Pistachio* genus, such as species of *P. lentiscus* L., *R. palaestinus* Boiss. (*R. lycioides* L.), *R. alaternus* L., *Z. Spina-christi* L. and many macchie and steppes, shrubs, herbaceous and landscape vegetation, such as *A. spinosa* L., *R. palaestinum* Feinbrun, *A.s foetida* L., *C. abyssinica* Kunth and Bouche, *L. barbarum* L., *L. europaeum* L., *N. glauca* Graham, *L. depressum* Stocks, *L. schweinfurthii* Dammer, *L. shawii* Roem. and Schult., *S. sinaicum* Boiss., *S. incanum* L., *P. pungens* Willd., *P. brachyodon* (Boiss.) Zohary, *P. chrysophylla* Boiss., *B. saxatilis* Sieber ex. C. Presl., *B. philistaea* Bornm., *B. undulata* (Sieber ex Fresen.) Benth., *B. arabica* (Boiss.) Maire and Weiller, *P. platystegia* Post., *P. viscosa* Poir., *S. eigii* Zohary, *S. dominica* L., *S. lanigera* Poir., *S. thymbra* L., *S. thymbrifolia* Hedge and Feinbrun, *S. palaestina* L., *S. fruticosa* Miller, *S. officinalis* L., *S. aegyptiaca* L., *S. palaestina* Benth., *S. aethiopsis* L., *M. fruticosa* (L.) Druce., *T. capitatum* L., *T. creticum* L., *T. capitata* (L.) Cav., *T. spicata* L., *B. populneus* (Schott and Endl.) R.Br., *J. mimosaeifolia* D. Don., *C. spinosa* L., *C. sicula* Duh., *C. aegyptia* Lam., *C. australis* L., *A. halimus* L., *N. mucronata* (Forssk.) Asch. and Schweinf., *H. persicum* Bunge, *H. negevensis* (Iljin and Zohary) L. Boulos, *S. fruticosa* (L.) L., *A. javanica* (Burm.f.) Juss. ex Schult., *S. imbricata* Forssk., *S. cyclophylla* Baker, *A. macrostachyum* (Moric.) Piirainen and G. Kadereit, *S. palaestina* Eig. and Zohary, *H. lancifolius* (Boiss.) Kothe-Heinr., *H. salicornicum* (Moq.) Bunge ex Boiss., *O. natrix* L., *A. andrachne* L., *L. nobilis* L., *P. aquilinum* (L.) Kuhn, *M. azedarach* L., *P. mascula* (L.) Miller, *A. filiculoides* Lam., *L. pyrotechnica* (Forssk.) Decne., *S. officinalis* L., *A. aleppica* DC., *G. tournefortii* L., *A. arborescens* L., *A. monosperma* Delile, *A. garcinii* (Burm.f.) DC., *P. dioscoridis* (L.) DC., *A. sieberi* Besser., *A. horridus* L., *A. palaestinus* Baker, *S. asperan* L., *P. aculeata* L., *O. baccatus* Delile, *N. oleander* L., *C. acutum* L., *P. aphylla* Decne., *M. peregrina* (Forssk.) Fiori, *G. villosa* Willd., *E. aphylla* Forskal, *E. foeminea* Forssk., *A. halimus* L., *A. setifera* Moq., *A. syriaca* Iljin, *A. orientalis* (L.) Boiss., *A. strigosa* Boiss. and Hohen., *A. galilaea* Boiss., *A. tinctoria* (L.) Tausch, *A. altissima* (Miller) Swingle, *R. tinctorum* L., *R. tenuifolia* D'Urv., *R. chalepensis* L., *T. hirsuta* (L.) Endl., *V. eremobium* Murb., *V. fruticosum* Post., *H. helix* L., *E. crassifolium* L'Her., *E. glaucophyllum* (L.) L'Hér., *E. arborescens* (Desf.) Willd., *E. acaule* (L.) Becherer and Thell., *E. creticum* Lam., *E. falcatum* F. Delaroché, *E. glomeratum* Lam., *E. maritimum* L., *E. cannabinum* L., *E. hierosolymitana* Boiss., *E. hirta* L., *E. hirsuta* L., *E. terracina* L., *B. aegyptiaca* (L.) Delile, *Z. dumosum* Boiss., *N. retusa* (Forssk.) Ascherson, *F. bruguieri* DC., *F. mollis* Delile, *F. orientalis* C. Presl., *Fagonia arabica* L., *C. arabica* (Boiss.) Diagn. Pl. Orient, *C. lanatus* Vahl., *C. colocynthis* (L.) Schrader, *C. dorycnium* L., *I. cairica* (L.) Sweet, *I. imperati* (Vahl.) Griseb., *H. aureus* L., *P. orientalis* (L.) Feinbrun, *M. myrtifolia* Boiss. et Hohen., *M. nervosa* (Desf.) Benth., *C. insulare* (Candargy) Govaerts, *E. cannabinum* L., *Doellia bovei* (DC.) Anderb., *H. sanguineum* (L.) Kostel., *I. maris-mortui* Feinbrun, *C. iphionoides* (Boiss. and Blanche) Brul., *C. tinctoria* (L.) J. Gay, *C. hierosolymitana* Boiss., *C. reuteriana* Boiss., *C. syriaca* Boiss., *E. philistaeus* Feinbrun and Zohary, *V. vilosa* Roth., *F. thymifolia* (L.) Webb., *C. creticus* L., *G. canum* Req. ex. DC., *G. elongatum* C. Presl., *G. humifusum* M. Bieb., *C. acutum* L., *E. glomeratum* Poir., *E. fruticosum* Desf., *E. angustifolium* Mill., *H. maris-mortui* Zohary, *P. orientalis* (L.) Feinbrun, *H. bacciferum* Forssk., *H. arbainense* Fresen., *M. ciliata* (Forskal) I. M. Johnston, *H. rotundifolium* Lehm., *C. creticum* Mill., *M. canescens* Boiss., *N. marina* var. *intermedia* (Wolfg. ex Gorski) Rendle, *D. triradiata* Hochst. Ex. Boiss., *F. vulgare* Miller, *F. biverticillata* J. Thieb., *F. communis* L., *F. orientalis* L., *F. tingitana* L., *F. syriaca* Boiss., *C. maculatum* L., *F. clypeata* (L.) Medik., *F. eriocarpa* (DC.) Boiss., *D. harra* (Forssk.) Boiss., *E. crassipes* Fisch. and C. A. Mey., *F. bisumbellata* (Forssk.) Bubani, *F. tenacissima* L., *V. cruciatum* Sieber ex. Boiss., *G. arabicum* Fresen., *G. flavum* Crantz, *G. grandiflorum* Boiss. and A. Huet., *V. agnus-castus* L., *G. arabica* Jaub. and Spach, *H. micranthus* L., *H. hemistemon* J. Gay, *H. bulbosum* L., *F. arundinacea* Schreb., *H. triquetrifolium* Turra, *A. parvifolia* Sm., *I. atrofusca* Baker, *I. atropurpurea* Baker, *I. palaestina* (Baker) Boiss., *I. vartanii* Foster, *G. italicus* Miller, *J. acutus* L., *J. articulatus* L., *J. subulatus* Forssk., *J. unilateralis* (Roem. and Schult.) O'Donell, *K. aegyptiaca* (L.) Nabelek, *K. judaica* Danin, *L. nudicaulis* (L.) Hooker fil., *L. tuberosus* L., *L. bicolor* (Boiss.) Eig. and Feinbrun, *L. pyrotechnica* (Forssk.) Decne., *F. ferruginea* (L.), *V. tiberiadis* Boiss., *V. sinaiticum* Benth., *V. galilaeum* Boiss., *V. jordanicum* Murb., *V. gaillardotii*

Boiss., *V. officinalis* L., *V. luteola* (Jacq.) Benth., *C. monogyna* Vahl., *C. epithymum* (L.), *C. pedicellata* Ledeb., *C. planiflora* Ten., *C. palaestina* Boiss. and many other species. For the *Quercetalia calliprinii* order [63], we found characteristic species such as *Quercus spp.*, *Q. calliprinus* Webb. or *Q. palaestina* K., *Q. inthaburensis* Decne., *Q. boissieri* Reut., *Q. infectoria* Olivier, *Q. cerris* L., *Q. look* Kotschy, *Q. libani* G. Olivier, *C. siliqua* L., *S. junceum* L., *F. cariaca* L., *M. alba* L., *M. nigra* L., *O. ficus indica* (L.) Miller, *C. siliquastrum* L., *P. gillesii* Hook, *A. cyanophylla* Lindl., *S. japonica* L., *C. villosa* (Poir.) Link, etc. Species characteristic of the alliance (*Quercu–Pistacion lentisci*) were also found, such as *P. lentiscus* L., *P. palaestina* Boiss., *P. khinjuk* Stocks, *P. saportae* Burnat., *P. vera* L., *P. atlantica* Desf., *P. terebinthus* L., *S. molle* L., *R. coriaria* L., *R. palaestinus* Boiss. (*R. lycioides* L.), *R. alaternus* L., *Z. Lotus* (L.) Lam., *Z. Spina-christi* L. Desf., *P. spina-christi* Miller, *Z. jujuba* Miller, *S. tripartita* (Ucria.) Moffett., *S. thea* (Osbeck) M.C.Johnst., *M. germanica* L., *C. azarolus* L., *A. communis* L., *C. oriana* (L.) DC., *S. spinosum* (L.) Spach, *P. syriaca* Boiss., *C. monogyna* Jacq., *M. communis* Desf., *P. coccinea* M. Roem., *P. spinosa* L., *F. retusa* L., *F. sycomorus* L., *F. cariaca* L., *M. alba* L., *M. nigra* L., *O. europaea* L., *P. media* L., *O. oleaster* Hoffmanns. and Link, *A. obtusifolium* Sm. or *A. syriscum* Boiss., *A. monspessulanum* L., etc.

However, the ecological characteristics, chorotypes, habitats, climatology and plant geography distributions in this proposed class have been studied, as shown in the fourth table (Table 4), where the plants are distributed into deserts, shrub-steppes, semi-steppe shrublands and Mediterranean woodlands and shrublands, in addition to Mediterranean maquis and forests.

Table 4. Ecological and habitat characteristics of distributed plants.

| Species | Chorotype | Habitat | Distribution | Climate |
|--|-------------------|-------------------------------------|--|-----------|
| <i>Quercus calliprinus</i> Webb. (<i>Quercus palaestina</i> K., <i>Quercus coccifera</i> L.) | M | Mediterranean maquis and forests | Mediterranean woodlands and shrublands, semi-steppe shrublands, Mt. Hermon | M |
| <i>Quercus inthaburensis</i> Decne. | M | Mediterranean maquis and forests | Mediterranean woodlands and shrublands | M |
| <i>Quercus infectoria</i> Olivier | M, IT | Mediterranean maquis and forests | Mediterranean woodlands and shrublands | M |
| <i>Quercus look</i> Kotschy | Oro-Mediterranean | Tragacanth shrub vegetation | Oro-Mediterranean | M |
| <i>Quercus libani</i> G. Olivier | Oro-Mediterranean | Tragacanth shrub vegetation | Oro-Mediterranean | M |
| <i>Quercus boissieri</i> Reut. (<i>Quercus boissieri</i> Reut. var. <i>latifolia</i> (Boiss.) Zohary) | M, IT | Mediterranean maquis and forests | Mediterranean woodlands and shrublands | M |
| <i>Quercus cerris</i> L. | M | Mediterranean maquis and forests | Mediterranean woodlands and shrublands | M |
| <i>Pistacia palaestina</i> Boiss. | M | Mediterranean maquis and forests | Mediterranean woodlands and shrublands, semi-steppe shrublands | M |
| <i>Pistacia saportae</i> Burnat. | M | Mediterranean maquis and forests | Mediterranean woodlands and shrublands, semi-steppe shrublands | M |
| <i>Pistacia lentiscus</i> L. | M | Mediterranean maquis and forests | Mediterranean woodlands and shrublands, semi-steppe shrublands | M |
| <i>Rhamnus palaestinus</i> Boiss. | M | Mediterranean maquis and forests | Mediterranean woodlands and shrublands, semi-steppe shrublands | M, Tr, SD |
| <i>Rhamnus disperma</i> Ehrenb.ex. Boiss. | M | Mediterranean maquis and forests | Mediterranean woodlands and shrublands, semi-steppe shrublands | SD, ED |
| <i>Rhamnus alaternus</i> L. | M | Mediterranean maquis and forests | Mediterranean woodlands and shrublands | M |

Table 4. Cont.

| Species | Chorotype | Habitat | Distribution | Climate |
|--|-----------|--|--|---------------|
| <i>Ceratonia siliqua</i> L. | M | Mediterranean maquis and forests | Mediterranean woodlands and shrublands, semi-steppe shrublands | M |
| <i>Pistacia atlantica</i> Desf. | IT | Mediterranean maquis and forest, hard rock outcrops | Mediterranean woodlands and shrublands, semi-steppe shrublands | M, Tr, SD |
| <i>Pistacia khinjuk</i> Stocks | IT | Mediterranean maquis and forests, hard rock outcrops | Mediterranean woodlands and shrublands, semi-steppe shrublands | M |
| <i>Schinus rip</i> L. | A | Mediterranean maquis and forests, hard rock outcrops | Mediterranean woodlands and shrublands | M |
| <i>Rhus coriaria</i> L. | IT | Mediterranean maquis and forests, hard rock outcrops | Mediterranean woodlands and shrublands, semi-steppe shrublands | M |
| <i>Schinus terebinthifolius</i> Raddi. | A | Mediterranean maquis and forests, hard rock outcrops | Mediterranean woodlands and shrublands, desert, semi-steppe shrublands | M, Tr, SD |
| <i>Rhus ripartite</i> (Ucria) Grande | M, SA | Hard rock outcrops | Deserts, shrub-steppes, semi-steppe shrublands, Mediterranean woodlands and shrublands | Tr, SD |
| <i>Zizyphus Spina-christi</i> L. Desf. | SA | Humid habitats, deserts, shrub-steppes, Mediterranean grasslands, thermophilous plants | Deserts, shrub-steppes, semi-steppe shrublands, Mediterranean woodlands and shrublands | M, Tr, SD, ED |
| <i>Zizyphus Lotus</i> (L.) Lam. | M, SA | Batha, phrygana | Mediterranean woodlands and shrublands, semi-steppe shrublands | Tr, SD |
| <i>Paliurus spina-christi</i> Miller | M, IT | Mediterranean maquis and forests, hard rock outcrops | Mediterranean woodlands and shrublands | M |
| <i>Zizyphus jujuba</i> Miller | S | Humid habitats, deserts, shrub-steppes, Mediterranean grasslands, thermophilous plants | Deserts, shrub-steppes, semi-steppe shrublands, Mediterranean woodlands and shrublands | M, Tr, SD, ED |
| <i>Sageretia thea</i> (Osbeck) M. C. Johnst. | IT | Cleavages of hard rocks | Deserts, shrub-steppes, semi-steppe shrublands | Tr SD |
| <i>Arbutus unedo</i> L. | M | Mediterranean maquis and forests, hard rock outcrops | Mediterranean woodlands and shrublands | M |
| <i>Mespilus germanica</i> L. | M | Mediterranean maquis and forests, hard rock outcrops | Mediterranean woodlands and shrublands | M |
| <i>Crataegus azarolus</i> L. | M | Mediterranean maquis and forests, hard rock outcrops | Mediterranean woodlands and shrublands | M |
| <i>Amygdalus ramonensis</i> Danin | IT | Hard rock outcrops | Shrub-steppes | TZ, SD |
| <i>Prunus dulcis</i> (Mill.) D. A. Webb. | M, IT | Mediterranean maquis and forests, hard rock outcrops | Mediterranean woodlands and shrublands | M |
| <i>Crataegus oriana</i> (L.) DC. | M | Mediterranean maquis and forests, hard rock outcrops | Mediterranean woodlands and shrublands | M |

Table 4. Cont.

| Species | Chorotype | Habitat | Distribution | Climate |
|---|-----------|--|--|---------|
| <i>Sarcopoterium spinosum</i> (L.) Spach (<i>Poterium spinosum</i> L.) | M | Batha, phrygana | Shrub-steppes, deserts, Mt. Hermon, semi-steppe shrublands, Mediterranean woodlands and shrublands | M |
| <i>Pyrus syriaca</i> Boiss. | M, IT | Mediterranean maquis and forests, hard rock outcrops | Mediterranean woodlands and shrublands, semi-steppe shrublands, montane vegetation of Mt. Hermon | M |
| <i>Crataegus monogyna</i> Jacq. | M, ES | Mediterranean maquis and forests, hard rock outcrops | Mediterranean woodlands and shrublands | M |
| <i>Malus communis</i> Desf. | M | Mediterranean maquis and forests, hard rock outcrops | Mediterranean woodlands and shrublands | M |
| <i>Pyracantha coccinea</i> M. Roem. | M, ES | Mediterranean maquis and forests, hard rock outcrops | Mediterranean woodlands and shrublands | M |
| <i>Prunus ursina</i> Kotschy | M | Mediterranean maquis and forest and hard rock outcrops | Mediterranean woodlands and shrublands | M |
| <i>Prunus korshinskyi</i> Hand.-Mazz. | M | Mediterranean maquis and forest and hard rock outcrops | Mediterranean woodlands and shrublands | M |
| <i>Prunus arabica</i> (Olivier) Meikle. | IT | Mediterranean maquis and forest and hard rock outcrops | Mediterranean woodlands and shrublands | Tr |
| <i>Rubus sanguineus</i> Friv. | M, IT | Humid habitats | Mediterranean woodlands and shrublands, semi-steppe shrublands, montane vegetation of Mt. Hermon | M, ED |
| <i>Pinus halepensis</i> (L.) Miller | M | Mediterranean maquis and forests, hard rock outcrops | Mediterranean woodlands and shrublands, semi-steppe shrublands, montane vegetation of Mt. Hermon | M |
| <i>Cupressus sempervirens</i> L. | M | Hard rock outcrops | Mediterranean woodlands and shrublands | M |
| <i>Pinus pinea</i> L. | EP-EC | Disturbed habitats | Mediterranean woodlands and shrublands | M |
| <i>Pinus canariensis</i> C. Smith | M | Mediterranean maquis and forests, hard rock outcrops | Mediterranean woodlands and shrublands | M |
| <i>Pinus brutia</i> Tenore | EP-EC | Mediterranean maquis and forests, hard rock outcrops | Mediterranean woodlands and shrublands | M |
| <i>Cupressus arizonica</i> Greene | M | Mediterranean maquis and forests, hard rock outcrops | Mediterranean woodlands and shrublands | M |
| <i>Seidliziz rosmarinus</i> Buge ex. Boiss. | SA | Deserts, salty habitats | Deserts, shrub-steppes, semi-steppe shrublands | SA, SD |
| <i>Juniperus phoenicea</i> L. | M | Hard rock outcrops, shrub-steppes | Mediterranean woodlands and shrublands | M |
| <i>Juniperus excelsa</i> M. Bieb. | M, ES | Tragacanth shrub vegetation (Oro-Mediterranean) | Tragacanth shrub vegetation (Oro-Mediterranean) | M |
| <i>Juniperus drupacea</i> Labill. | M | Tragacanth shrub vegetation (Oro-Mediterranean) | Mt. Hermon, Mediterranean woodlands and shrublands | M |

Table 4. Cont.

| Species | Chorotype | Habitat | Distribution | Climate |
|--|------------|--|--|---------------|
| <i>Spartium junceum</i> L. (<i>Genista juncea</i> (L.) Scop.) | M | Mediterranean maquis and forests, hard rock outcrops | Mediterranean woodlands and shrublands, montane vegetation of Mt. Hermon | M |
| <i>Cersis siliquastrum</i> L. | M | Mediterranean maquis and forests, hard rock outcrops | Mt. Hermon, Mediterranean woodlands and shrublands | M |
| <i>Glycyrrhiza glabra</i> L. | ES, M, IT | Humid habitats | Mediterranean woodlands and shrublands, semi-steppe shrublands | M |
| <i>Acacia saligna</i> (Labill) H. L. Wendl. Fil. (<i>Acacia cyanophylla</i> Lindl.) | Australian | Light soils | Mediterranean woodlands and shrublands | M, Tr |
| <i>Calicotome villosa</i> (Poir.) Link | M | Batha, phrygana, Mediterranean maquis and forests | Mt. Hermon, Mediterranean woodlands and shrublands, semi-steppe shrublands | M |
| <i>Retama raetam</i> (Forssk.) Webb. and Berthel. | SA | Sand | Deserts, Mediterranean woodlands and shrublands, shrub-steppes, semi-steppe shrublands | M, Tr, SD, ED |
| <i>Genista monspessulana</i> (L.) O. Bolós and Vigo. | M | Batha, phrygana, Mediterranean maquis and forests | Mt. Hermon, Mediterranean woodlands and shrublands, semi-steppe shrublands | M |
| <i>Acacia radiana</i> Savi. | S | Deserts, thermophilous plants | Deserts, Mediterranean woodlands and shrublands, shrub-steppes, semi-steppe shrublands | DX |
| <i>Ficus microcarpa</i> L. F. | M, IT | Humid | Mediterranean woodlands and shrublands, semi-steppe shrublands, shrub-steppes | M |
| <i>Ficus sycomorus</i> L. | S | Light soils | Mediterranean woodlands and shrublands, semi-steppe shrublands, shrub-steppes | M |
| <i>Ficus cariaca</i> L. | M, IT | Humid | Deserts, Mediterranean woodlands and shrublands, shrub-steppes, semi-steppe shrublands | M, Tr, SD |
| <i>Morus alba</i> L. | M, IT, EC | Disturbed habitats | Mediterranean woodlands and shrublands | M |
| <i>Morus nigra</i> L. | M, IT, EC | Disturbed habitats | Mediterranean woodlands and shrublands | M |
| <i>Prosopis farcta</i> (Banks et Sol.) Macbride | IT | Batha, phrygana | Deserts, semi-steppe shrublands, shrub-steppes, Mediterranean woodlands and shrublands, Mt. Hermon | M, Tr, SD, ED |
| <i>Olea europaea</i> L. (<i>Olea sativa</i> Hoffmanns. and Link.) | M | Mediterranean maquis and forests, hard rock outcrops | Mediterranean woodlands and shrublands, Mt. Hermon, semi-steppe shrublands | M |
| <i>Olea oleaster</i> Hoffmanns. and Link. (<i>Olea sativa</i> Hoffmanns. and Link.) | M | Mediterranean maquis and forests, hard rock outcrops | Mediterranean woodlands and shrublands, semi-steppe shrublands | M |
| <i>Olea europaea</i> var. <i>sylvestris</i> | M | Mediterranean maquis and forests, hard rock outcrops | Mediterranean woodlands and shrublands, semi-steppe shrublands | M |
| <i>Phillyrea latifolia</i> L. (<i>Phillyria media</i> L.) | M | Mediterranean maquis and forests, hard rock outcrops | Mediterranean woodlands and shrublands, semi-steppe shrublands | M |
| <i>Salix alba</i> L. | ES, M, IT | Humid | Mediterranean woodlands and shrublands | M |

Table 4. Cont.

| Species | Chorotype | Habitat | Distribution | Climate |
|--|-----------|--|--|---------------|
| <i>Populus alba</i> L. | M | Humid | Mediterranean woodlands and shrublands, montane vegetation of Mt. Hermon | M |
| <i>Populus euphratica</i> Olivier | IT, SA | Humid | Deserts, semi-steppe shrublands, shrub-steppes, Mediterranean woodlands and shrubland | M, Tr, SD, ED |
| <i>Tamarix aphylla</i> (L.) Karsten (<i>Tamarix articulata</i> Vahl.) | S | Desert, thermophilous plants | Mediterranean woodlands and shrublands, semi-steppe shrublands, shrub-steppes, deserts and extreme deserts | ED |
| <i>Tamarix jordanis</i> Boiss. | M | Humid | Mediterranean woodlands and shrublands, semi-steppe shrublands, shrub-steppes, deserts and extreme deserts | M, Tr, SD, ED |
| <i>Tamarix palaestina</i> Bertol. | SA | Deserts, thermophilous plants | Deserts, semi-steppe shrublands, shrub-steppes, Mediterranean woodlands and shrublands | Tr, SD, ED |
| <i>Tamarix nilotica</i> (Ehrenb.) Bunge (<i>Tamarix senegalensis</i> DC.) | SA | Deserts, salty habitats | Deserts, semi-steppe shrublands, shrub-steppes, Mediterranean woodlands and shrublands | Tr, SD, ED |
| <i>Tamarix negevensis</i> Zohary | SA | Deserts, salty habitats, thermophilous plants | Deserts | Tr, SD, ED |
| <i>Tamarix parviflora</i> DC. | M | Deserts, salty habitats | Mediterranean woodlands and shrublands | M |
| <i>Tamarix tetragyna</i> Ehrenb. | M, SA | Saline sandy soils, swamps, edges of salt marshes | Mediterranean woodlands and shrublands, semi-steppe shrublands, shrub-steppes, deserts and extreme deserts | M, Tr, SD, ED |
| <i>Tamarix gennessarensis</i> Zohary | M | Humid | Mediterranean woodlands and shrublands, Mt. Hermon | M |
| <i>Reaumuria negevensis</i> Zohary and Danin | SA | Shrub-steppes | Deserts, shrub-steppes, semi-steppe shrublands | SD, ED |
| <i>Tamarix passerinoides</i> Delile | S, SA | Deserts, salty habitats | Deserts | ED |
| <i>Tamarix amplexicaulis</i> Ehrenb. | S, SA | Deserts, salty habitats | Deserts | ED |
| <i>Acer obtusifolium</i> Sm. | M | Mediterranean maquis and forests | Deserts | M |
| <i>Acer monspessulanum</i> L. (<i>Acer hermonium</i> (Bornm.) Bornm. and Schweinf.) | M, ES | Tragacanth shrub vegetation (Oro-Mediterranean) | Mt. Hermon | M |
| <i>Polygonum palaestinum</i> Zohary | M, SA | Sand | Mediterranean woodlands and shrublands | M, Tr, SD, |
| <i>Persicaria lanigera</i> (R.Br.) Sojak | T | Humid | Mediterranean woodlands and shrublands | M, Tr, SD, ED |
| <i>Atraphaxis spinosa</i> L. | IT | Shrub-steppes | Deserts, shrub-steppes | SD, ED |
| <i>Rheum palaestinum</i> Feinbrun | IT | Shrub-steppes | Deserts, shrub-steppes | SD, ED |
| <i>Anagyris foetida</i> L. | M, IT | Mediterranean maquis and forests | Semi-steppe shrublands, Mediterranean woodlands and shrublands | M, Tr |
| <i>Colutea abyssinica</i> Kunth and Bouche | IT | Deserts, thermophilous plants | Deserts, Mediterranean woodlands and shrublands, semi-steppe shrublands | SD |
| <i>Lycium barbarum</i> sensu Boiss. non L. (<i>Lycium depressum</i> Stocks) | IT | Deserts, thermophilous plants | Deserts, Mediterranean woodlands and shrublands, semi-steppe shrublands | ED |

Table 4. Cont.

| Species | Chorotype | Habitat | Distribution | Climate |
|--|-----------|---|---|------------|
| <i>Lycium europaeum</i> L. (<i>Lycium mediterraneum</i> Dunal.) | M | Mediterranean maquis and forests, shrub-steppes | Mediterranean woodlands and shrublands, semi-steppe shrublands, shrub-steppes, deserts and extreme deserts | M, Tr |
| <i>Nicotiana glauca</i> Graham | PT | Disturbed habitats | Mediterranean woodlands and shrublands, semi-steppe shrublands, shrub-steppes, deserts and extreme deserts | SD, ED |
| <i>Lycium schweinfurthii</i> Dammer | M | Light soils | Deserts, Mediterranean woodlands and shrublands, semi-steppe shrublands | M |
| <i>Lycium shawii</i> Roem. and Schult. (<i>Lycium arabicum</i> Boiss.) | SA, S | Deserts, thermophilous plants | Deserts, semi-steppe shrublands, shrub-steppes, Mediterranean woodlands and shrublands | SD, ED |
| <i>Solanum sinaicum</i> Boiss. | ES, M, IT | Disturbed habitats, cultivated areas (weeds) | Deserts, semi-steppe shrublands, shrub-steppes, Mediterranean woodlands and shrublands | Tr, SD, ED |
| <i>Solanum incanum</i> L. | S | Deserts, thermophilous plants | Deserts, semi-steppe shrublands, shrub-steppes, Mediterranean woodlands and shrublands | ED |
| <i>Phlomis pungens</i> Willd. (<i>Phlomis herba-venti</i> L.) | M, IT | Batha, phrygana, cultivated areas | Mediterranean woodlands and shrublands | M |
| <i>Phlomis brachyodon</i> (Boiss.) Zohary ex. Rech. F. | IT | Batha, phrygana, cultivated areas (weeds) | Mediterranean woodlands and shrublands | M, Tr |
| <i>Phlomis chrysophylla</i> Boiss. | M | Batha, phrygana | Mediterranean woodlands and shrublands, Mt. Hermon | M |
| <i>Ballota saxatilis</i> Sieber ex. C. Presl. | M | Hard rock outcrops | Mediterranean woodlands and shrublands, semi-steppe shrublands, Mt. Hermon | M |
| <i>Ballota philistaea</i> Bornm. | M | Sand | Mediterranean woodlands and shrublands | M |
| <i>Ballota undulata</i> (Sieber ex Fresen.) Benth | M | Batha, phrygana, hard rock outcrops | Shrub-steppes, Mediterranean woodlands and shrublands, deserts, semi-steppe shrublands, Mt. Hermon | M, Tr, SD |
| <i>Bassia arabica</i> (Boiss.) Maire and Weiller (<i>Chenolea arabica</i> Boiss.) | SA | Sandy soils | Deserts, semi-steppe shrublands, shrub-steppes | SD, ED |
| <i>Phlomis platystegia</i> Post. | IT | Batha, phrygana | Mediterranean woodlands and shrublands, semi-steppe shrublands | SD |
| <i>Phlomis viscosa</i> Poiret. | M | Batha, phrygana | Mediterranean woodlands and shrublands, montane vegetation of Mt. Hermon | M |
| <i>Salvia eigii</i> Zohary | M | Batha, phrygana | Semi-steppe shrublands, Mediterranean woodlands and shrublands | M |
| <i>Salvia dominica</i> L. | M | Batha, phrygana | Semi-steppe shrublands, Mediterranean woodlands and shrublands and deserts | M, Tr |
| <i>Salvia lanigera</i> Poir. | M, SA | Shrub-steppes | Deserts, semi-steppe shrublands, Mediterranean woodlands and shrublands, shrub-steppes | M, SD |

Table 4. Cont.

| Species | Chorotype | Habitat | Distribution | Climate |
|--|-----------|---|---|------------|
| <i>Satureja thymbra</i> L. | M | Batha, phrygana | Mediterranean woodlands and shrublands | M |
| <i>Satureja thymbriifolia</i> Hedge and Feinbrun | IT, SA | Batha, phrygana | Mediterranean woodlands and shrublands | SD |
| <i>Stachys palaestina</i> L. | M | Hard rock outcrops | Mediterranean woodlands and shrublands, semi-steppe shrublands, montane vegetation of Mt. Hermon | M |
| <i>Salvia fruticosa</i> Miller (<i>Salvia triloba</i> L. f.) | M | Mediterranean maquis and forests | Mediterranean woodlands and shrublands | M |
| <i>Salvia officinalis</i> L. | M | Mediterranean maquis and forests | Mediterranean woodlands and shrublands | M |
| <i>Salvia aegyptiaca</i> L. | SA | Batha, phrygana, disturbed habitats, cultivated areas (weeds) | Semi-steppe shrublands, Mediterranean woodlands and shrublands, Mt. Hermon | SD, ED |
| <i>Salvia palaestina</i> Benth. | M, IT | Batha, phrygana | Semi-steppe shrublands, Mediterranean woodlands and shrublands | M, Tr, SD |
| <i>Salvia sclarea</i> L. | M, IT | Batha, phrygana | Mediterranean woodlands and shrublands | M |
| <i>Micromeria fruticosa</i> (L.) Druce. (<i>Micromeria serpyllifolia</i> (M. Bieb.) Boiss.) | M | Hard rock outcrops | Semi-steppe shrublands, Mediterranean woodlands and shrublands | M, Tr |
| <i>Teucrium capitatum</i> L. | M, IT | Batha, phrygana | Semi-steppe shrublands, Mt. Hermon, deserts, shrub-steppes, Mediterranean woodlands and shrublands | M, TZ, SD |
| <i>Teucrium creticum</i> L. | M | Mediterranean maquis and forests | Mediterranean woodlands and shrublands | M |
| <i>Thymbra capitata</i> (L.) Cav. (<i>Coridothymus capitatus</i> (L.) Rchb.f.) | M | Batha, phrygana | Mt. Hermon, semi-steppe shrublands, Mediterranean woodlands and shrublands | M |
| <i>Thymbra spicata</i> L. | M | Batha, phrygana | Mediterranean woodlands and shrublands | M |
| <i>Jacaranda acutifolia</i> Humb. and Bonpl. (<i>Jacaranda mimosaeifolia</i> D. Don.) | M | Batha, phrygana | Mediterranean woodlands and shrublands | M |
| <i>Capparis spinosa</i> L. | M | Heavy soils | Mediterranean woodlands and shrublands, semi-steppe shrublands, shrub-steppes, montane vegetation of Mt. Hermon | M, Tr, SD |
| <i>Capparis sicula</i> Duh. | M, IT, SA | Disturbed habitats | Semi-steppe shrublands, Mediterranean woodlands and shrublands | M, Tr |
| <i>Capparis aegyptia</i> Lam. | IT, SA | Heavy soils | Semi-steppe shrublands, shrub-steppes, deserts and extreme deserts | SD, ED |
| <i>Celtis australis</i> L. | M | Mediterranean maquis and forests | Mediterranean woodlands and shrublands, montane vegetation of Mt. Hermon | M |
| <i>Atriplex halimus</i> L. | M, SA | Salty habitats | Shrub-steppes, semi-steppe shrublands, deserts, Mediterranean woodlands and shrublands | Tr, SD, ED |

Table 4. Cont.

| Species | Chorotype | Habitat | Distribution | Climate |
|--|------------|--|--|-------------------------|
| <i>Noaea mucronata</i> (Forssk.) Asch. and Schweinf. | IT | Shrub-steppes | Deserts, shrub-steppes, semi-steppe shrublands, Mediterranean woodlands and shrublands, Mt. Hermon | Tr, SD, ED |
| <i>Haloxylon persicum</i> Bunge <i>Haloxylon negevensis</i> (Iljin and Zohary) L. Boulos (<i>Hammada negevensis</i> Iljin and Zohary) | IT SA | Sand Sand, deserts, shrub-steppes | Deserts Shrub-steppes, semi-steppe shrubs, deserts | ED SD, ED |
| <i>Salicornia fruticosa</i> (L.) L. | M, SA | Humid habitats, salty habitats | Shrub-steppes, deserts, semi-steppe shrublands, Mediterranean woodlands and shrubland | M, SD, ED |
| <i>Aerva javanica</i> (Burm.f.) Juss. ex. Schult. | T | Deserts, thermophilous (heat-loving) plants | Semi-steppe shrublands, shrub-steppes, deserts and extreme deserts | SD, ED |
| <i>Salsola imbricata</i> Forssk. | S | Desert, thermophilous plants | shrub-steppes, semi-steppe shrubs, Mediterranean woodlands and shrubs, deserts | DX |
| <i>Salsola cyclophylla</i> Baker | SA | Deserts, salty habitats, thermophilous plants | Shrub-steppes, deserts | SD, ED |
| <i>Arthrocaulon macrostachyum</i> (Mor.) Piiirainen and G. Kadereit <i>Suaeda palaestina</i> Eig. and Zohary | M SA, S | Humid habitats, salty habitats Deserts, salty habitats | Semi-steppe shrublands, Mediterranean woodlands and shrubs, deserts Deserts, semi, steppe shrubs | M, Tr, SD, ED SD, ED |
| <i>Halothamnus lancifolius</i> (Boiss.) Kothe-Heinr. | IT | Mediterranean maquis and forests | Deserts, shrub-steppes, semi-steppe shrublands, Mediterranean woodlands and shrubs | M, Tr, SD, DX |
| <i>Haloxylon salicornicum</i> (Moq.) Bunge ex Boiss. | S | Sand | Deserts, shrub-steppes, semi-steppe shrubs Mediterranean woodlands and shrubs, semi-steppe | DX |
| <i>Ononis natrix</i> L. | M | Batha, phrygana | shrublands, semi-steppe shrubs, Mt. Hermon Mediterranean woodlands and shrubs, | M, Tr, SD |
| <i>Arbutus andrachne</i> L. | M | Mediterranean maquis and forests | semi-steppe shrubs | M |
| <i>Laurus nobilis</i> L. | M | Mediterranean maquis and forests | Mediterranean woodlands and shrubs, Mt. Hermon | M |
| <i>Pteridium aquilinum</i> (L.) Kuhn | PT | Humid | Mediterranean woodlands and shrubs | M |
| <i>Melia azedarach</i> L. | M | Disturbed habitats | Mediterranean woodlands and shrubs, semi-steppe shrubs | M |
| <i>Paeonia mascula</i> (L.) Miller | M, ES | Mediterranean maquis and forests | Mediterranean woodlands and shrubs | M |
| <i>Azolla filiculoides</i> Lam. | A | Humid habitats | Mediterranean woodlands and shrubs | M |
| <i>Leptadenia pyrotechnica</i> (Forssk.) Decne. | SA, S | Deserts, thermophilous plants | Deserts | ED |
| <i>Styrex officinalis</i> L. | M | Mediterranean maquis and forests | Mt. Hermon, Mediterranean woodlands and shrubs, semi-steppe shrubs | M |
| <i>Achillea aleppica</i> DC. | IT | Batha, phrygana | Semi-steppe shrubs, Mediterranean woodlands and shrubs | TZ |

Table 4. Cont.

| Species | Chorotype | Habitat | Distribution | Climate |
|---|-----------|--|--|---------------|
| <i>Achillea fragrantissima</i> (Forssk.) Sch. Bip. | IT, SA | Shrub-steppes | Shrub-steppes, Mediterranean woodlands and shrublands, deserts, semi-steppe shrublands, Mt. Hermon | SD, ED |
| <i>Gundelia tournefortii</i> L. | IT | Batha, phrygana, Shrub-steppes | Mt. Hermon, Mediterranean woodlands and shrublands, semi-steppe shrublands | M, Tr, SD |
| <i>Artemisia arborescens</i> L. | M | Mediterranean maquis and forest | Mediterranean woodlands and shrublands | M, TZ |
| <i>Artemisia monosperma</i> Delile | SA | Sand | Mediterranean woodlands and shrublands, semi-steppe shrublands, shrub-steppes, deserts and extreme deserts | M, Tr, SD, ED |
| <i>Anvillea garcinii</i> (Burm.f.) DC. | SA | Deserts, thermophilous plants | Deserts | SD, ED |
| <i>Pluchea dioscoridis</i> (L.) DC. | SA, S | Humid | Mediterranean woodlands and shrublands, deserts, semi-steppe shrublands | M, Tr, SD |
| <i>Artemisia sieberi</i> Besser | IT | Shrub-steppes | Deserts, shrub-steppes, semi-steppe shrublands, Mediterranean woodlands and shrublands | SD, ED |
| <i>Asparagus horridus</i> L. (<i>Asparagus stipularis</i> Forssk.) | M, SA | Sand, hard rock outcrops | Shrub-steppes, Mediterranean woodlands and shrublands, deserts, semi-steppe shrublands | M, Tr, SD, ED |
| <i>Asparagus palaestinus</i> Baker | M | Mediterranean maquis and forests | Mediterranean woodlands and shrublands | M, Tr |
| <i>Smilax aspera</i> L. | M | Mediterranean maquis and forests | Mediterranean woodlands and shrublands | M |
| <i>Parkinsonia aculeata</i> L. | AM | Disturbed habitats | Deserts, shrub-steppes, semi-steppe shrublands, Mediterranean woodlands and shrublands | M, Tr |
| <i>Ochradenus baccatus</i> Delile | SUA | Deserts, thermophilous plants | Deserts, shrub-steppes, semi-steppe shrublands, Mediterranean woodlands and shrublands | SD, ED |
| <i>Nerium oleander</i> L. | M | Humid | Deserts, shrub-steppes, semi-steppe shrublands, Mediterranean woodlands and shrublands | M, Tr, SD |
| <i>Cynanchum acutum</i> L. | M, IT | Humid | Deserts, shrub-steppes, semi-steppe shrublands, Mediterranean woodlands and shrublands | M, Tr |
| <i>Periploca aphylla</i> Decne. | S | Hard rock outcrops | Deserts, shrub-steppes, semi-steppe shrublands, Mediterranean woodlands and shrublands | SD, ED |
| <i>Moringa peregrina</i> (Forssk.) Fiori | A | Deserts, thermophilous plants | Mediterranean woodlands and shrublands, deserts, semi-steppe shrublands | ED |
| <i>Grewia villosa</i> Willd. | T | Hard rock outcrops, thermophilous plants | Deserts | ED |
| <i>Ephedra aphylla</i> Forskal | SA | Sand, hard rock outcrops | Deserts, shrub-steppes, semi-steppe shrublands, Mediterranean woodlands and shrublands | Tr, SD, ED |

Table 4. Cont.

| Species | Chorotype | Habitat | Distribution | Climate |
|--|-----------|-------------------------------------|---|------------|
| <i>Ephedra foeminea</i> Forssk (<i>Ephedra campylopoda</i> C. A. Mey) | M | Mediterranean maquis and forests | Mediterranean woodlands and shrublands, semi-steppe shrublands, shrub-steppes, montane vegetation of Mt. Hermon | M, Tr, SD |
| <i>Anabasis setifera</i> Moq. | SA | Deserts | Deserts, shrub-steppes, semi-steppe shrublands | SD, ED |
| <i>Anabasis syriaca</i> Iljin | IT | Shrub-steppes | Deserts, shrub-steppes, semi-steppe shrublands | SD, ED |
| <i>Alkanna orientalis</i> (L.) Boiss. | M, IT | Shrub-steppes | Mt. Hermon | M, SD |
| <i>Alkanna strigosa</i> Boiss and Hohen. | M | Batha, phrygana | Semi-steppe shrublands, Mediterranean woodlands and shrublands | M, Tr |
| <i>Alkanna galilaea</i> Boiss. | M | Batha, phrygana | Mediterranean woodlands and shrublands | M |
| <i>Alkanna tinctoria</i> (L.) Tausch | M | Sand | Mediterranean woodlands and shrublands, semi-steppe shrublands | M, Tr |
| <i>Ailanthus altissima</i> (Mill.) Swingle | T | Disturbed habitats | Mediterranean woodlands and shrublands | M |
| <i>Rubia tinctorum</i> L. | M, IT | Mediterranean maquis and forests | Mediterranean woodlands and shrublands, semi-steppe shrublands | Tr |
| <i>Rubia tenuifolia</i> D'Urv. | M | Mediterranean maquis and forests | Mediterranean woodlands and shrublands, semi-steppe shrublands, Mt. Hermon | M, Tr |
| <i>Ruta chalepensis</i> L. | M | Mediterranean maquis and forests | Mediterranean woodlands and shrublands, semi-steppe shrublands Shrub-steppes, deserts, semi-steppe shrublands, Mediterranean woodlands and shrublands | M, Tr, SA |
| <i>Thymelaea hirsuta</i> (L.) Endl. | M, SA | Batha, phrygana | Mediterranean woodlands and shrublands, semi-steppe shrublands | M, Tr |
| <i>Verbascum tiberiadis</i> Boiss. | M | Batha, phrygana | Deserts, shrub-steppes, semi-steppe shrublands, Mediterranean woodlands and shrublands, Mt. Hermon | Tr, SD |
| <i>Verbascum sinaiticum</i> Benth. | IT, SA | Deserts, shrub-steppes | Mediterranean woodlands and shrublands | M |
| <i>Verbascum galilaeum</i> Boiss. | M | Humid | Mediterranean woodlands and shrublands, semi-steppe shrublands, shrub-steppes | Tr, SD |
| <i>Verbascum jordanicum</i> Murb. | IT | Mediterranean maquis and forests | Deserts | SD, ED |
| <i>Verbascum eremobium</i> Murb. | IT | Deserts, shrub-steppes | Deserts, shrub-steppes, semi-steppe shrublands | Tr, SD, ED |
| <i>Verbascum fruticosum</i> Post. | IT | Shrub-steppes | Mediterranean woodlands and shrublands | M |
| <i>Verbascum gaillardotii</i> Boiss. | M | Mediterranean maquis and forests | Mediterranean woodlands and shrublands, semi-steppe shrublands, shrub-steppes, deserts and extreme deserts, montane vegetation of Mt. Hermon | M, Tr |

Table 4. Cont.

| Species | Chorotype | Habitat | Distribution | Climate |
|---|-----------|--|--|------------|
| <i>Hedera helix</i> L. | M, ES | Mediterranean maquis and forests, hard rock outcrops | Mediterranean woodlands and shrublands | M |
| <i>Erodium crassifolium</i> L'Her. ex. Aiton. (<i>Erodium hirtum</i> Willd.) | SA | Deserts, shrub-steppes | Mediterranean woodlands and shrublands, semi-steppe shrublands, shrub-steppes, deserts and extreme deserts, montane vegetation of Mt. Hermon | SD, ED |
| <i>Erodium glaucophyllum</i> (L.) L'Hér. | SA | Saline soils | Deserts, shrub-steppes, semi-steppe shrublands | SD, ED |
| <i>Erodium arborescens</i> (Desf.) Willd. | SA | Deserts, shrub-steppes | Deserts, shrub-steppes, semi-steppe shrublands | ED |
| <i>Erodium acaule</i> (L.) Becherer and Thell. (<i>Erodium romanum</i> (L.) Willd.) | M | Batha, phrygana | Mt. Hermon, Mediterranean woodlands and shrublands | M |
| <i>Eryngium creticum</i> Lam. | M | Batha, phrygana | Mediterranean woodlands and shrublands, semi-steppe shrublands, shrub-steppes, deserts and extreme deserts, montane vegetation of Mt. Hermon | M, Tr |
| <i>Eryngium falcatum</i> F. Delaroche | M | Mediterranean maquis and forests, hard rock outcrops | Mediterranean woodlands and shrublands, semi-steppe shrublands, shrub-steppes, deserts and extreme deserts, montane vegetation of Mt. Hermon | M |
| <i>Eryngium glomeratum</i> Lam. | M | Batha, phrygana, tragacanth shrub vegetation (Oro-Mediterranean), hard rock outcrops | Mediterranean woodlands and shrublands, semi-steppe shrublands, shrub-steppes, deserts and extreme deserts, montane vegetation of Mt. Hermon | M, Tr, SD |
| <i>Eryngium maritimum</i> L. | M, SA, IT | Coastal | Mediterranean woodlands and shrublands, semi-steppe shrublands, shrub-steppes, deserts and extreme deserts, montane vegetation of Mt. Hermon | M |
| <i>Eupatorium cannabinum</i> L. | ES, M, IT | Humid | Mediterranean woodlands and shrublands, deserts and extreme deserts | M |
| <i>Euphorbia hierosolymitana</i> Boiss. | M | Batha, phrygana | Mediterranean woodlands and shrublands, semi-steppe shrublands | M |
| <i>Euphorbia graminea</i> Jacq. | AM | Disturbed habitats | Mediterranean woodlands and shrublands | M |
| <i>Euphorbia hirsuta</i> L. | M | Humid | Mediterranean woodlands and shrublands | M |
| <i>Euphorbia terracina</i> L. | M | Sand | Mediterranean woodlands and shrublands, semi-steppe shrublands | M |
| <i>Balanites aegyptiaca</i> (L.) Delile | S | Deserts, thermophilous plants | Deserts, shrub-steppes, semi-steppe shrublands | Tr, SD, ED |
| <i>Zygophyllum dumosum</i> Boiss. | SA | Deserts, shrub-steppes | Shrub-steppes, semi-steppe shrublands, deserts | SD, ED |

Table 4. Cont.

| Species | Chorotype | Habitat | Distribution | Climate |
|--|-----------|--|---|------------|
| <i>Nitraria retusa</i> (Forssk.) Ascherson | SA | Salty habitats | Semi-steppe shrublands, shrub-steppes, deserts and extreme deserts | SD, ED |
| <i>Fagonia bruguieri</i> DC. | SA | Deserts, thermophilous plants | Desert, shrub-steppes | ED |
| <i>Fagonia mollis</i> Delile | SA | Deserts, shrub-steppes | Shrub-steppes, semi-steppe shrublands, Mediterranean woodlands and shrublands, deserts | SD, ED |
| <i>Fagonia orientalis</i> J. Presl and C. Presl | SA | Sand, deserts | Deserts, shrub-steppes | ED |
| <i>Fagonia arabica</i> L. | SA | Sand | Deserts, shrub-steppes, semi-steppe shrublands | SD, ED |
| <i>Chenolea arabica</i> (Boiss.) Diagn. Pl. Orient | SA | Salty habitats | Semi-steppe shrublands, shrub-steppes, deserts | SD, ED |
| <i>Convolvulus lanatus</i> Vahl. | SA | Sand | Deserts, shrub-steppes, semi-steppe shrublands, Mediterranean woodlands and shrublands | Tr, SD, ED |
| <i>Citrullus colocynthis</i> (L.) Schrader | SA | Sand | Deserts, shrub-steppes, semi-steppe shrublands, Mediterranean woodlands and shrublands | Tr, ED |
| <i>Convolvulus dorycnium</i> L. | M | Bathas and semi-steppe shrublands | Mediterranean woodlands and shrublands, semi-steppe shrublands | M, Tr |
| <i>Ipomoea cairica</i> (L.) Sweet | T | Disturbed habitats | Mediterranean woodlands and shrublands | M, Tr |
| <i>Ipomoea imperati</i> (Vahl.) Griseb. | T, M, ES | Mediterranean strands | Mediterranean woodlands and shrublands, semi-steppe shrublands Mediterranean woodlands and shrublands, semi-steppe shrublands, shrub-steppes, deserts and extreme deserts, montane vegetation of Mt. Hermon | M, Tr |
| <i>Hyoscyamus aureus</i> L. | M, IT | Cliffs, old walls and ruins to 1200 m | Mediterranean woodlands and shrublands, semi-steppe shrublands, shrub-steppes, deserts and extreme deserts, montane vegetation of Mt. Hermon | M, Tr, SD |
| <i>Podonosma orientalis</i> (L.) Feinbrun, (<i>Podonosma oriental</i> (L.) Feinbrun, <i>Podonosma syriacum</i> (Labill.) Boiss.) | M, IT | Hard rock outcrops | Mediterranean woodlands and shrublands, semi-steppe shrublands, shrub-steppes, deserts and extreme deserts, montane vegetation of Mt. Hermon | M, Tr, SD |
| <i>Micromeria myrtifolia</i> Boiss.et Hohen. | M, IT | Hard rock outcrops | Mediterranean woodlands and shrublands, semi-steppe shrublands | M, Tr |
| <i>Micromeria nervosa</i> (Desf.) Benth. | M | Hard rock outcrops | Mediterranean woodlands and shrublands, semi-steppe shrublands | M, Tr |
| <i>Clinopodium insulare</i> (Candargy) Govaerts | M | Batha, phrygana | Mediterranean woodlands and shrublands, semi-steppe shrublands | M, Tr |
| <i>Eupatorium cannabinum</i> L. | ES, M, IT | Humid habitats | Mediterranean woodlands and shrublands, deserts and extreme deserts | M |
| <i>Doellia bovei</i> (DC.) Anderb. | SA, S | Humid habitats | Semi-steppe shrublands, Mediterranean woodlands and shrublands, deserts | M, SD, ED |

Table 4. Cont.

| Species | Chorotype | Habitat | Distribution | Climate |
|--|-----------|---|--|---------------|
| <i>Helichrysum sanguineum</i> (L.) Kostel. | M | Batha, phrygana | Mediterranean woodlands and shrublands, semi-steppe shrublands | M |
| <i>Iphiona maris-mortui</i> Feinbrun | SA | Deserts, thermophilic (heat-loving plants) | Characteristics of the salt sea | SD |
| <i>Chiliadenus iphionoides</i> (Boiss. and C. I. Blanche) Brullo. | M | Hard rock outcrops, steppes, and desert parts | Mediterranean woodlands and shrublands, semi-steppe shrublands, shrub-steppes, deserts and extreme deserts | M, Tr, SD |
| <i>Cota tinctoria</i> (L.) J. Gay. (<i>Anthemis tinctoria</i> L.) | M | Batha, phrygana | Mediterranean woodlands and shrublands, Mt. Hermon | M |
| <i>Crepis hierosolymitana</i> Boiss. | M | Batha, phrygana | Mediterranean woodlands and shrublands, semi-steppe shrublands, Mt. Hermon | M |
| <i>Crepis reuteriana</i> Boiss. | M | Mediterranean maquis and forests | Mediterranean woodlands and shrublands, semi-steppe shrublands, Mt. Hermon | M |
| <i>Cynara syriaca</i> Boiss. | M, IT | Batha, phrygana | Mediterranean woodlands and shrublands | M |
| <i>Echinops philistaeus</i> Feinbrun and Zohary | M | Sand | Semi-steppe shrublands, Mediterranean woodlands and shrublands, deserts | M, Tr |
| <i>Vicia vilosa</i> Roth. | ES, M, IT | Batha, phrygana | Mediterranean woodlands and shrublands, semi-steppe shrublands | M |
| <i>Fumana thymifolia</i> (L.) Webb. | M | Batha, phrygana | Mediterranean woodlands and shrublands, semi-steppe shrublands, shrub-steppes, deserts and extreme deserts, Montane vegetation of Mt. Hermon | M, Tr |
| <i>Cistus creticus</i> L. | M | Batha, phrygana | Mediterranean woodlands and shrublands, semi-steppe shrublands, shrub-steppes, montane vegetation of Mt. Hermon | M |
| <i>Galium canum</i> Req. ex DC. | M | Batha, phrygana | Mediterranean woodlands and shrublands, semi-steppe shrublands, shrub-steppes, montane vegetation of Mt. Hermon | M, Tr |
| <i>Galium elongatum</i> C. Presl. | M | Batha, phrygana | Mediterranean woodlands and shrublands, semi-steppe shrublands, shrub-steppes, montane vegetation of Mt. Hermon | M |
| <i>Galium humifusum</i> M. Bieb. | M, IT | Humid habitats | Semi-steppe shrublands, Mediterranean woodlands and shrublands | M, Tr |
| <i>Cynanchum acutum</i> L. | M | Batha, phrygana | Semi-steppe shrublands, Mt. Hermon, Mediterranean woodlands and shrublands | M, Tr |
| <i>Echium glomeratum</i> Poir. | M | Batha, phrygana | Semi-steppe shrublands, Mt. Hermon, Mediterranean woodlands and shrublands | M |
| <i>Echiochilon fruticosum</i> Desf. | SA | Sand | Shrub-steppes, deserts, semi-steppe shrublands, Mediterranean woodlands and shrublands | M, Tr, SD, ED |

Table 4. Cont.

| Species | Chorotype | Habitat | Distribution | Climate |
|--|-----------|-------------------------------------|---|---------------|
| <i>Echium angustifolium</i> Miller | M | Batha, phrygana | Deserts, shrub-steppes, semi-steppe shrublands, Mediterranean woodlands and shrublands | M, Tr |
| <i>Heliotropium maris-mortui</i> Zohary | SA | Deserts, thermophilous plants | Shrub-steppes, semi-steppe shrublands, deserts | SD, ED |
| <i>Heliotropium bacciferum</i> Forssk. | SA, S | Deserts, thermophilous plants | Shrub-steppes, semi-steppe shrublands, deserts | ED |
| <i>Heliotropium arbainense</i> Fresen. | SA | Deserts, thermophilous plants | Shrub-steppes, semi-steppe shrublands, deserts | SD, ED |
| <i>Moltkiopsis ciliata</i> (Forskal) I. M. Johnston | SA | Sand | Mediterranean woodlands and shrublands, shrub-steppes, deserts and extreme deserts | M, Tr, SD, ED |
| <i>Heliotropium rotundifolium</i> Lehm. | IT | Batha, phrygana | Mediterranean woodlands and shrublands, semi-steppe shrublands, shrub-steppes, deserts and extreme deserts | M, Tr, SA |
| <i>Cynoglossum creticum</i> Miller (<i>Cynoglossum pictum</i> Aiton, <i>Cynoglossum atlanticum</i> Murb., <i>Cynoglossum siculum</i> Guss.) | M, IT | Batha, phrygana | Mediterranean woodlands and shrublands, semi-steppe shrublands, shrub-steppes, montane vegetation of Mt. Hermon | M |
| <i>Morettia canescens</i> Boiss. | ES | Batha, phrygana | Mediterranean woodlands and shrublands, semi-steppe shrublands, shrub-steppes, montane vegetation of Mt. Hermon | ED |
| <i>Najas delilei</i> Rouy | PT | | Shrub-steppes, deserts, semi-steppe shrublands, Mediterranean woodlands and shrublands | M, ED |
| <i>Deverra triradiata</i> Hochst. Ex. Boiss. | SA | Deserts, shrub-steppes | Shrub-steppes, deserts, semi-steppe shrublands, Mediterranean woodlands and shrublands | SD, ED |
| <i>Foeniculum vulgare</i> Miller | M, IT | Batha, phrygana, disturbed habitats | Mediterranean woodlands and shrublands, semi-steppe shrublands, shrub-steppes, deserts and extreme deserts | M, Tr |
| <i>Ferula biverticillata</i> J. Thieb | M | Batha, phrygana, hard rock outcrops | Mediterranean woodlands and shrublands, semi-steppe shrublands | Tr |
| <i>Ferula communis</i> L. | M | Batha, phrygana, hard rock outcrops | Mediterranean woodlands and shrublands, semi-steppe shrublands, shrub-steppes | M, Tr |
| <i>Ferula orientalis</i> L. | M | Batha, phrygana, hard rock outcrops | Mediterranean woodlands and shrublands, semi-steppe shrublands | Tr |
| <i>Ferula tingitana</i> L. | M | Batha, phrygana, hard rock outcrops | Mediterranean woodlands and shrublands, semi-steppe shrublands | M |
| <i>Ferulago syriaca</i> Boiss. | M | Batha, phrygana, hard rock outcrops | Mediterranean woodlands and shrublands | M |
| <i>Conium maculatum</i> L. | ES, M, IT | Nutrient-rich soils, ruderal | Mediterranean woodlands and shrublands, semi-steppe shrublands | M |
| <i>Fibigia clypeata</i> (L.) Medik | M, IT | Batha, phrygana, hard rock outcrops | Mediterranean woodlands and shrublands, Mt. Hermon | M, Tr |

Table 4. Cont.

| Species | Chorotype | Habitat | Distribution | Climate |
|---|-----------|---|---|---------------|
| <i>Fibigia eriocarpa</i> (DC.) Boiss. | M | Mediterranean maquis and forests | Mediterranean woodlands and shrublands | M |
| <i>Diploaxis harra</i> (Forssk.) Boiss. | SA | Deserts, shrub-steppes | Shrub-steppes, semi-steppe shrublands, deserts, Mediterranean woodlands and shrublands | SD, ED |
| <i>Erysimum crassipes</i> Fisch. and C.A.Mey. | IT | Batha, phrygana | Mediterranean woodlands and shrublands, semi-steppe shrublands, shrub-steppes, deserts and extreme deserts | M, Tr |
| <i>Fimbristylis bisumbellata</i> (Forssk.) Bubani | SubT | Humid | Deserts, semi-steppe shrublands, Mediterranean woodlands and shrublands | M |
| <i>Forsskaolea tenacissima</i> L. | SA, S | Deserts, thermophilous plants | Deserts, semi-steppe shrublands, Mediterranean woodlands and shrublands | SD, ED |
| <i>Viscum cruciatum</i> Sieber ex. Boiss. | M | Mediterranean maquis and forests | Mediterranean woodlands and shrublands, semi-steppe shrublands | M, Tr |
| <i>Glaucium arabicum</i> Fresen. | IT | Shrub-steppes | Shrub-steppes, deserts, semi-steppe shrublands, Mediterranean woodlands and shrublands | SD |
| <i>Glaucium flavum</i> Crantz | M | Mediterranean strands | Mediterranean woodlands and shrublands | M |
| <i>Glaucium grandiflorum</i> Boiss. and A.Huet | IT | Disturbed habitats, shrub-steppes | Shrub-steppes, deserts, semi-steppe shrublands, Mediterranean woodlands and shrublands | M, Tr, SD, ED |
| <i>Vitex agnus-castus</i> L. | M | Humid | Deserts, Mediterranean woodlands and shrublands, semi-steppe shrublands, Mt. Hermon | M, Tr |
| <i>Globularia arabica</i> Jaub. and Spach | SA | Batha, phrygana, sand, hard rock outcrops | Deserts, Mediterranean woodlands and shrublands, semi-steppe shrublands, Mt. Hermon | M, SD, ED |
| <i>Hibiscus micranthus</i> L. | T | Distributes | Shrub-steppes, Mediterranean woodlands and shrublands, semi-steppe shrublands | ED |
| <i>Herniaria hemistemon</i> J. Gay | SA | Deserts, shrub-steppes, salty habitats | Deserts, Mediterranean woodlands and shrublands, semi-steppe shrublands, Mt. Hermon | SD, ED |
| <i>Hordeum bulbosum</i> L. | M, IT | Batha, Phrygana | Shrub-steppes, semi-steppe shrublands, Mediterranean woodlands and shrublands, Mt. Hermon | M, Tr |
| <i>Schedonorus arundinaceus</i> (Schreb.) Dumort. (<i>Festuca arundinacea</i> Schreb.) | ES, M, IT | Humid habitats | Mediterranean woodlands and shrublands, Mt. Hermon | M |
| <i>Hypericum triquetrifolium</i> Turra. | M, IT | Batha, phrygana | Mediterranean woodlands and shrublands, semi-steppe shrublands, shrub-steppes, Montane vegetation of Mt. Hermon | M, Tr |

Table 4. Cont.

| Species | Chorotype | Habitat | Distribution | Climate |
|--|-----------|-----------------------------------|--|---------------|
| <i>Aristolochia parvifolia</i> Sm. | M | Batha, phrygana | Mediterranean woodlands and shrublands, semi-steppe shrublands | M, Tr |
| <i>Iris atrofusca</i> Baker | IT | Batha, phrygana | Mediterranean woodlands and shrublands, semi-steppe shrublands | Tr, SD |
| <i>Iris atropurpurea</i> Baker | M | Batha, phrygana | Mediterranean woodlands and shrublands | M |
| <i>Iris palaestina</i> (Bak.) Boiss. | M | Batha, phrygana | The sandstone ridges of the coastal plain | M, Tr |
| <i>Iris vartanii</i> Foster | M | Batha, phrygana | Mediterranean woodlands and shrublands, semi-steppe shrublands | M, Tr |
| <i>Gladiolus italicus</i> Miller | M, IT | Batha, phrygana | Mediterranean woodlands and shrublands, semi-steppe shrublands | M, Tr |
| <i>Juncus acutus</i> L. (<i>Juncus littoralis</i> C.A.Mey.) (<i>Juncus spinosus</i> Forssk.) | M, IT | Humid habitats | Mediterranean woodlands and shrublands, semi-steppe shrublands, shrub-steppes, deserts and extreme deserts | M, Tr |
| <i>Juncus articulatus</i> L. | ES, M, IT | Humid habitats | Mediterranean woodlands and shrublands, semi-steppe shrublands | M |
| <i>Juncus subulatus</i> Forssk. | M | Humid habitats | Semi-steppe shrublands, shrub-steppes, Mediterranean woodlands and shrublands | M |
| <i>Jacquemontia unilateralis</i> (Roem. and Schult.) O'Donell | M | Batha, phrygana | Shrub-steppes, deserts, semi-steppe shrublands, Mediterranean woodlands and shrublands | M |
| <i>Kickxia aegyptiaca</i> (L.) Nabelek | M, SA | Batha, phrygana, deserts | Shrub-steppes, deserts, semi-steppe shrublands, Mediterranean woodlands and shrublands | M, Tr |
| <i>Kickxia judaica</i> Danin | SA | Hard rock outcrops, shrub-steppes | Semi-steppe shrublands, Mediterranean woodlands and shrublands | Tr, SD |
| <i>Launaea nudicaulis</i> (L.) Hooker fil. | SA | Deserts, thermophilous plants | Shrub-steppes, deserts, semi-steppe shrublands, Mediterranean woodlands and shrublands | SD, DX |
| <i>Leontodon tuberosus</i> L. | M | Batha, phrygana | Semi-steppe shrublands, Mediterranean woodlands and shrublands, Mt. Hermon | M, Tr |
| <i>Leopoldia bicolor</i> (Boiss.) Eig. and Feinbrun | M | Sand | Mediterranean woodlands and shrublands | M |
| <i>Leptadenia pyrotechnica</i> (Forssk.) Decne. | SA, S | Deserts, thermophilous plants | Deserts | ED |
| <i>Fimbristylis ferruginea</i> (L.) | T | Humid habitats | Mediterranean woodlands and shrublands | M |
| <i>Casuarina equisetifolia</i> L. | M, IT, SA | Light soils, deserts | Mediterranean woodlands and shrublands, semi-steppe shrublands, deserts | M, Tr, SD, ED |

Abbreviations: Chorotype: M (Mediterranean), OM (Oro-Mediterranean), IT (Irano-Turanian), SA (Saharo-Arabian), S (Sudanian), SUA (Sudanian African), A (American), ES (Euro-Siberian), EP-EC (exotic, planted, escaped from cultivation), EC (escaped from cultivation), T (Tropical), PT (Pluriregionalbor-trop) and SubT (subtropical-tropical). Climate region: M (Mediterranean), D (deserts), Tr. (transition), SD and ED (semi and extreme deserts), DX (desert mixed). Mt. Hermon: Mount Hermon.

Although Beit Jibrin rises slightly above sea level, it represents a unique pattern of forest vegetation and biodiversity. It is rich in endemic plants, which are estimated to account for about 37 (12.75%) endemic species of the total plants, home to more than 290 species of plants, including forests, oak, steppes, copses and high shrub lands. Therefore, they are part of the mountain highland plants, as in the highlands that extend from the southernmost point of Hebron to the north of Palestine, such as Jenin, Safed and Galilee; Palestinian coast plants and the Mediterranean basin region, such as Jabal Al-Sheikh, Jaffa, Acre, Haifa, Nazareth and Ashdod; savannah plants; and other African desert plants, such as Sinai and the Red Sea area. However, Beit Jibrin represents forest plants found in West Asia, the Mediterranean region, North Africa and the Palestinian coast. Beit Jibrin has an infra-thermomediterranean thermotype and a dry ombrotype. In this study, two new plant groups were identified in the Beit Jibrin area: *Cupressus sempervirentis*—*Pinetum halepensis* ass. nova and *Pistacio lentisci*—*Quercetum calliprini* ass. nova.

The suggested syntaxonomical scheme for this study is:

Class: *Quercetea ilicis* Br.-Bl. ex. A. and O. Bolòs 1950 [69]

Order: *Pinetalia halepensis* Biondi et al. (2014) [27]

Alliance: *Cupressus sempervirentis*—*Pinus halepensis* all. nova

Cupressus sempervirentis—*Pinetum halepensis* ass. nova

Class: *Quercetea ilicis* Br.-Bl. ex. A. and O. Bolòs 1950 [62]

Class: *Quercetea calliprini* or *palaestini* nova.

Order: *Quercetalia calliprini* Zohary 1960 [64]

Alliance: *Quercion calliprini* Zohary 1955, 1960 [63,64]

Pistacio lentisci—*Quercetum calliprini* ass. nova

Syntaxonomical scheme:

Class: *Quercetea ilicis* Br.-Bl. ex A. Bolòs et O. de Bolòs in A. Bolòs y Vayreda 1950 [69]

Order: *Quercetalia ilicis* Br.-Bl. ex Molinier 1934 [70]

Quercetalia calliprini Zohary 1955, 1960 [63,64]

Alliance: *Cerantonio*—*Pistacion lentisci* Zohary ex Zohary et Orshan 1959 [74]

Associations:

-*Pistacio palaestinae*—*Quercetum lokii** (Ighbareyeh et al., 2014) [16]

-*Capparido sinaicae*—*Ceratonietum siliquae* (Ighbareyeh et al., 2014) [16]

-*Cerasus microcarpae*—*Quercetum ithaburensis* * (Ighbareyeh et al., 2014) [16]

-*Pyro siriaca*—*Abietetum cilicicae* * (Ighbareyeh et al., 2014) [16]

-*Abio ciliciae*—*Ceratonietum siliquae* (Ighbareyeh et al., 2014) [16]

-*Periploco aphylli*—*Pinetum halepensis* (Ighbareyeh et al., 2014) [16]

-*Cytisopsis pseudocytiso*—*Tamaricetum tetragynae* (Ighbareyeh et al., 2014) [16]

-*Crataego sinaicae*—*Tamaricetum jordani* (Ighbareyeh et al., 2014) [16]

Class: *Quercetea ilicis* Br.-Bl. ex A. Bolòs et O. de Bolòs in A. Bolòs y Vayreda 1950 [62]

Order: *Quercetalia calliprini* Zohary 1955, 1960 [62,63]

Alliance: *Cerantonio*—*Pistacion lentisci* Zohary ex Zohary et Orshan 1959 [74]

Associations:

-*Pino halepensis*—*Quercetum lokii** (Ighbareyeh et al., 2018) [75]

-*Pistacio palaestinae*—*Ceratonietum siliquae** (Ighbareyeh et al., 2018) [75]

-*Quercus libanii*—*Tamaricetum palaestinae** (Ighbareyeh et al., 2018) [75]

Class: *Quercetea ilicis* Br.-Bl. ex A. Bolòs et O. de Bolòs in A. Bolòs y Vayreda 1950 [62]

Order: *Quercetalia calliprini* Zohary 1955, 1960 [63,64]

Alliance: *Pistacio*—*Quercion lokii* (Ighbareyeh et al., 2021) [19]

Cerantonio siliquae—*Quercion calliprinae* (Ighbareyeh et al., 2021) [19]

Pino halepensis—*Cupressetum sempervirenti* (Ighbareyeh et al., 2021) [19]

Associations:

-*Pistacio lentisci*—*Quercetum lokii* (Ighbareyeh et al., 2021) [19]

-*Cerantonio siliquae*—*Quercetum calliprini*. (Ighbareyeh et al., 2021) [19]

-*Pino halepensis*—*Cupressetum sempervirentis* (Ighbareyeh et al., 2021) [19]

* Associations in which olive cultivation is possible.

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References

- Jehad, M.H.I.; Suliemeh, A.A.A.; Ighbareyeh, M.M.H.; Cano-Carmoma, E.; Cano-Ortiz, A. Olive (*Olea europaea* L.) of Jerusalem in Palestine. *Trends Tech. Sci. Res.* **2019**, *3*, 555617. [[CrossRef](#)]
- Ighbareyeh, J.M.H.; Cano-Ortiz, A.; Cano, E. Case study: Analysis of the physical factors of Palestinian bioclimate. *Am. J. Clim. Chang.* **2014**, *3*, 223–231. [[CrossRef](#)]
- Ighbareyeh, J.M.H. Effect of environmental factors on Apricot (*Prunus armeniaca* L.) yield in the city of Jerusalem occupied, Palestine. *Asian J. Res. Agric. For.* **2021**, *7*, 12–24. [[CrossRef](#)]
- Zohary, M. *Plant Life of Palestine*; Ronald Press Company: New York, NY, USA, 1962.
- Zohary, M. *Flora Palaestina 1966*; Israel Academy of Sciences and Humanities: Jerusalem, Israel, 1966; Volume I.
- Zohary, M. *Flora Palaestina. Part 1, Text Equisetaceae to Moringaceae*; Israel Academy of Science and Humanities: Jerusalem, Israel, 1966; p. 346.
- Zohary, M. *Flora Palaestina 1972*; Israel Academy of Sciences and Humanities: Jerusalem, Israel, 1972; Volume II.
- Zohary, M. *Geobotanical Foundations of the Middle East*; Gustav Fisher Verlag: Stuttgart, Germany, 1973; Volumes I and II, p. 739.
- Zohary, M. *Flora Palaestina 1986*; Israel Academy of Sciences and Humanities: Jerusalem, Israel, 1986; Volume IV.
- Zohary, M. *Flora Palaestina 1987*; Israel Academy of Sciences and Humanities: Jerusalem, Israel, 1987; Volume III.
- Dothan, F.N. *Flora Palaestina, Part Three, Text Ericaceae to Compositae*; Israel Academy of Science and Humanities: Jerusalem, Israel, 1978; p. 481.
- Dothan, F.N. *Flora Palaestina, Part Four Plates, Text Alismaceae to Orchidaceae*; Academy of Science and Humanities: Jerusalem, Israel, 1986; p. 525.
- Danin, A.; Feinbrun-Dothan, N. *Analytical Flora of Eretz-Israel*; CANA Publishing House Ltd.: Jerusalem, Israel, 1991.
- Danin, A. The inclusion of adventive plants in the second edition of Flora Palaestina. *Willdenowia* **2004**, *30*, 305–314. [[CrossRef](#)]
- Danin, A. *Distribution Atlas of Plants in Flora Palaestina Area*, 2nd ed.; Academy of Science and Humanities: Jerusalem, Israel, 2004; p. 520. ISBN 9652081671.
- Ighbareyeh, J.M.H.; Cano-Ortiz, A.; Suliemeh, A.A.A.; Ighbareyeh, M.M.H.; Cano, E. Phytosociology with other characteristic biologically and ecologically of plant in Palestine. *Am. J. Plant Sci.* **2014**, *5*, 3104–3118. [[CrossRef](#)]
- Ighbareyeh, J.; Cano-Ortiz, A.; Carmona, E.; Suliemeh, A.; Ighbareyeh, M. Flora endemic rare and bioclimate of Palestine. *Open Access Libr. J.* **2017**, *4*, 1–14. [[CrossRef](#)]
- Ighbareyeh, J.M.H.; Cano-Ortiz, A.; Cano, E. Endemic plant species in the west of Hebron, Palestine. *Eur. J. Appl. Sci.* **2021**, *9*, 368–385. [[CrossRef](#)]
- Ighbareyeh, J.M.H.; Suliemeh, A.A.-R.A.; Abu Ayash, A.M.; Sheqwara, M.N.; Ortiz, A.C.; Carmona, E.C. Biodiversity and phytosociological analysis of plants in wadi Al-Quf nursery reserve North–Western of Hebron City in Palestine. *J. Plant Sci.* **2021**, *9*, 13. [[CrossRef](#)]
- Ercanlı, I.; Günlü, A.; Şenyurt, M.; Keleş, S. Artificial neural network models predicting the leaf area index: A case study in pure even-aged Crimean pine forests from Turkey. *For. Ecosyst.* **2018**, *5*, 29. [[CrossRef](#)]
- Pérez-Latorre, A.V.; Navas, P.; Navas, D.; Gil, Y.; Cabezano, B. Datos sobre la flora y la vegetación de la Serranía de Ronda (Málaga, España). *Acta Bot. Malacit.* **1998**, *23*, 149–191. [[CrossRef](#)]
- Pérez-Latorre, A.V.; Navas-Fernández, D.; Gavira, O.; Caballero, G.; Cabezano, B. Vegetación del Parque Natural de Las Sierras Tejeda, Almijara y Alhama (Málaga-Granada, España). *Acta Bot. Malacit.* **2004**, *29*, 117–190. [[CrossRef](#)]
- Mendes, P.; Meireles, C.; Vila-Viçosa, C.; Musarella, C.M.; Pinto-Gomes, C. Best management practices to face degraded territories occupied by *Cistus ladanifer* shrublands—Portugal case study. *Plant Biosyst. Int. J. Deal. Asp. Plant Biol.* **2013**, *149*, 494–502. [[CrossRef](#)]
- Pérez-García, F.J.; Akhiani, H.; Parsons, R.F.; Silcock, J.L.; Kurt, L.; Özdeniz, E.; Spampinato, G.; Musarella, C.M.; Sánchez, E.S.; Sola, F.; et al. A first inventory of gypsum flora in the Palearctic and Australia. *Mediterr. Bot.* **2018**, *39*, 35–49. [[CrossRef](#)]

25. Bartolucci, F.; Peruzzi, L.; Galasso, G.; Albano, A.; Alessandrini, A.; Ardenghi, N.M.G.; Astuti, G.; Bacchetta, G.; Ballelli, S.; Banfi, E.; et al. An updated checklist of the vascular flora native to Italy. *Plant Biosyst. Int. J. Deal. Asp. Plant Biol.* **2018**, *152*, 179–303. [[CrossRef](#)]
26. Musarella, C.M.; Mendoza-Fernández, A.J.; Mota, J.F.; Alessandrini, A.; Bacchetta, G.; Brullo, S.; Caldarella, O.; Ciaschetti, G.; Conti, F.; Di Martino, L.; et al. Checklist of gypsophilous vascular flora in Italy. *PhytoKeys* **2018**, *103*, 61–82. [[CrossRef](#)]
27. Biondi, E.; Blasi, C.; Allegranza, M.; Anzellotti, I.; Azzella, M.M.; Carli, E.; Casavecchia, S.; Copiz, R.; Del Vico, E.; Facioni, L.; et al. Plant communities of Italy: The vegetation prodrome. *Plant Biosyst. Int. J. Deal. Asp. Plant Biol.* **2014**, *148*, 728–814. [[CrossRef](#)]
28. Galasso, G.; Conti, F.; Peruzzi, L.; Ardenghi, N.M.G.; Banfi, E.; Celesti-Grapow, L.; Albano, A.; Alessandrini, A.; Bacchetta, G.; Ballelli, S.; et al. An updated checklist of the vascular flora alien to Italy. *Plant Biosyst. Int. J. Deal. Asp. Plant Biol.* **2018**, *152*, 556–592. [[CrossRef](#)]
29. Khalidi, W. *All That Remains: The Palestinian Villages Occupied and Depopulated by Israel in 1948*; Institute for Palestine Studies: Washington, DC, USA, 1992; ISBN 0-88728-224-5.
30. Hadawi, S. Village statistics of 1945: A classification of land and area ownership in Palestine. *Palest. Lib. Organ. Res. Cent.* **1970**, *34*, 30.
31. Abu-Sitta, S. *The Return Journey*; Palestine Land Society: London, UK, 2007; ISBN 0-9549034-1-2.
32. UNESCO World Heritage Centre. Region of the Caves & Hiding: Bet Guvrin-Maresha Archived 2017. Available online: <https://whc.unesco.org/en/list/1370/> (accessed on 27 October 2017).
33. Braun-Blanquet, J. *Pflanzensoziologie. Grundzüge der Vegetationskunde*, 3rd ed.; Springer: Vienna, Austria, 1964; p. 631. [[CrossRef](#)]
34. Braun-Blanquet, J. *Fitosociología. Bases para el Estudio de las Comunidades Vegetales*; Blume: Madrid, Spain, 1979; p. 820.
35. Van Der Maabel, E. Transformation of cover-abundance values in phytosociology and its effects on community similarity. *Plant Ecol.* **1979**, *39*, 97–114. [[CrossRef](#)]
36. Braun-Blanquet, J.; Bolòs, O.D. Les groupements végétaux du bassin moyen de l’Ebre et leur dynamisme. *An. Estac. Exp. Aula Dei* **1957**, *5*, 1–266.
37. Weber, H.; Moravec, J.; Theurillat, J.-P. International code of phytosociological nomenclature. *J. Veg. Sci.* **2000**, *11*, 739–768. [[CrossRef](#)]
38. Theurillat, J.-P.; Willner, W.; Fernández-González, F.; Bültmann, H.; Čarni, A.; Gigante, D.; Mucina, L.; Weber, H. International code of phytosociological nomenclature. *Appl. Veg. Sci.* **2020**, *24*. [[CrossRef](#)]
39. Bolòs, O.; De Molinier, R. Recherches phytosociologiques dans l’île de Majorque. *Collect. Bot.* **1958**, *34*, 699–865.
40. Oakley, K.P. The Excavation of Goarham’s Cave. Gibraltar 1951–1954. *Bull. Inst. Archaeology* **1958**, *4*, 1–219.
41. Bolòs, O.; De Vigo, J.; Masalles, R.M.; Ninot, J.M. *Manual dels Paisos Catalans*; Portic: Barcelona, Spain, 1990.
42. Pott, R. Phytosociology: A modern geobotanical method. *Plant Biosyst. Int. J. Deal. Asp. Plant Biol.* **2011**, *145*, 9–18. [[CrossRef](#)]
43. Biondi, E. Phytosociology today: Methodological and conceptual evolution. *Plant Biosyst. Int. J. Deal. Asp. Plant Biol.* **2011**, *145*, 19–29. [[CrossRef](#)]
44. Rivas-Martínez, S.; Cantó, P.; Fernández-González, F.; Sánchez-Mata, D. Revision de la clase Quercetea ilicis en Espana y Portugal: 1. Subalianza Quercenion ilicis. *Folia Bot. Matrit.* **1995**, *15*, 1–20.
45. Rivas-Martínez, S. Clasificación bioclimática de la Tierra. *Folia Bot. Matritensis* **1996**, *16*, 1–20.
46. Rivas-Martínez, S.; Sanchez, M.D.; Costa, M. North American boreal and western temperate forest vegetation (Syntaxonomical synopsis of the potential natural plant communities of North America, II. *Itinera Geobot.* **1999**, *12*, 5–316.
47. Rivas-Martínez, S.; Fernández-González, F.; Loidi, J.; Lousã, M.; Penas, A. Syntaxonomical checklist of vascular plant communities of Spain and Portugal to association level. *Itinera Geobot.* **2001**, *14*, 5–341.
48. Rivas-Martínez, S.; Díaz, T.E.; Fernández-González, F.; Izco, J.; Lousã, M.; Penas, A. Vascular plant communities of Spain and Portugal. Addenda to the syntaxonomical checklist of 2001. *Itinera Geobot.* **2002**, *15*, 5–432.
49. Rivas-Martínez, S.; Biondi, E.; Costa, M.; Mossa, L. Datos sobre la vegetación de la clase Quercetea ilicis en Cerdena. *Fitosociologia* **2003**, *40*, 35–38.
50. Rivas-Martínez, S.; Rivas Saenz, S.; Penas, A. Worldwide bioclimatic classification system. *Glob. Geobot.* **2011**, *1*, 1–634.
51. Rivas-Martínez, S.; Penas, A.; del Río, S.; Díaz, G.T.; Rivas-Sáenz, S. Bioclimatology of the Iberian Peninsula and the Balearic Islands. In *The Vegetation of the Iberian Peninsula*; Loidi, J., Ed.; Springer: Vienna, Austria, 2017; pp. 29–80.
52. Panetsos, C.P. Natural hybridization between *Pinus halepensis* and *Pinus brutia*. *Silvae Genet.* **1975**, *24*, 163–168.
53. Grandos, M.; Martín-Vicente, A.; García Novo, F. *Introducción del Pinus pinea en el Parque Natural de Doñana. En Actas del Seminario Sobre Reservas de la Biosfera*; La Rábida: Huelva, Spain, 1983.
54. Fernández-Galiano, E. Pasado, presente y futuro de los boques de la Península Ibérica. *Acta Bot. Malacit.* **1990**, *15*, 135–143. [[CrossRef](#)]
55. Gil, L.; Aranzazu, M.; Gordo, J.; De Miguel, J.; Mutke, S.; Catalán-Bachiller, G.; Iglesias, S. *Las Regiones Procedencia de Pinus pinea L*; Ministerio de Medio Ambiente: Madrid, Spain, 1997.
56. GIL, L. Consideraciones históricas sobre “*Pinus pinaster*” Aiton en el paisaje vegetal de la península ibérica. *Estudios Geográficos* **1991**, *52*, 5.
57. Martínez-Montes, E.; Alejandro, M.M.R.; Villalón-Torresn, D. Los pinares de pino piñonero en el sur peninsular. Papel en la dinámica natural en base a la arqueología prehistórica y protohistórica. Nuevas interpretaciones. *Cuad. Soc. Esp. Cien. For.* **2003**, *16*, 121–126.

58. Burrascanno, S.; Rosati, L.; Blasi, C. Plant species diversity in Mediterranean old-growth forests: A case study from central Italy. *Plant Biosyst.* **2009**, *143*, 190–200. [[CrossRef](#)]
59. Farjon, A. Biodiversity of Pinus (Pinaceae) in Mexico: Speciation and palaeo-endemism. *Bot. J. Linn. Soc.* **1996**, *121*, 365–384. [[CrossRef](#)]
60. Pérez-Latorre, A.V.; Casimiero, F.; García-Sánchez, J.; Cabezudo, B. Flora y vegetación del Paraje Natural Desfiladero de los Gaitanes y su entorno (Málaga). *Acta Bot. Malacit.* **2014**, *39*, 129–177. [[CrossRef](#)]
61. Pérez-Latorre, A.V.; Casimiro, F.; Cabezudo, B. Flora y vegetación de la sierra de Alcaparaín (Málaga, España). *Acta Bot. Malacit.* **2015**, *40*, 107–156. [[CrossRef](#)]
62. Pesaresi, S.; Bioindi, E.; Vagge, I.; Galdenzi, D.; Casavecchia, S. The Pinus halepensis Miller Forests in the central-eastern European Mediterranean basin. *Plant Biosyst.* **2017**, *151*, 512–529. [[CrossRef](#)]
63. Zohary, M. *Geobotany*; Sifriyat Poalim Ltd.: Maanit, Israel, 1955; 590p. (In Hebrew)
64. Zohary, M. The maquis of Quercus calliprinos in Israel and Jordan. *Bull. Res. Council. Isr.* **1960**, *9*, 51–72.
65. Ezra-Barnea. The Israel Oak Registry, International Oak Society Blog 2018. Available online: https://www.internationaloaksociety.org/content/israel-oak-registry#_ftnref1 (accessed on 20 November 2021).
66. Molero, M.J.; Pérez-Raya, F. Estudio fitosociológico de los sabinares de *Juniperus phoenicea* L. en el sector Malacitano-Almijarese (provincia corológica Bética). *Lazaroa* **1987**, *7*, 301–306.
67. Bonari, G.; Fernández-González, F.; Çoban, S.; Monteiro-Henriques, T.; Bergmeier, E.; Didukh, Y.P.; Xystrakis, F.; Angiolini, C.; Chytrý, K.; Acosta, A.T.; et al. Classification of the Mediterranean lowland to submontane pine forest vegetation. *Appl. Veg. Sci.* **2021**, *24*, e12544. [[CrossRef](#)]
68. Gil, L. *Las Transformaciones Históricas del Paisaje: La Permanencia y la Extinción Local del Pino Piñonero. Los Montes y su Historia. Una Perspectiva Política, Económica y Social*; Universidad de Huelva: Huelva, Spain, 1999; pp. 151–186.
69. Braun-Blanquet, J.; de Bolòs, O. Aperçu des Groupements Végétaux des Montagnes tarragonaises. *Collect. Bot* **1950**, *2*, 303–342.
70. Molinier, R. Études phytosociologiques et écologiques en Provence occidentale. *An. Mus. Hist. Nat. Marseille* **1934**, *27*, 1–273.
71. Rivas-Martínez, S. La vegetación de la clase Quercetea ilicis en España y Portugal. *An. Inst. Bot. Cavanilles* **1975**, *31*, 205–259.
72. Rivas-Martínez, S. Sobre la nueva clase Polygono-Poetea annuae. *Phytocoenologia* **1975**, *2*, 123–140. [[CrossRef](#)]
73. Tsiouvaras, C.N. Ecology and management of Kermes Oak (*Quercus coccifera* L.) Shrublands in Greece: A review. *J. Range Manag.* **1987**, *40*, 542. [[CrossRef](#)]
74. Zohary, M.; Orshan, G. The maquis of ceratonia siliqua in Israel. *Vegetatio* **1959**, *8*, 285–297. [[CrossRef](#)]
75. Ighbareyeh, J.M.H.; Carmona, E.C. A phytosociological of plant communities and Biodiversity in the East-South of Idna Village-Hebron of Palestine. *Int. J. Geosci.* **2018**, *9*, 44–58. [[CrossRef](#)]