

**Plant Biodiversity End Line Report at Al Makhroul Valley:
*Autumn, winter and Early Spring 2020/2021 Seasons***



***The Palestine Institute for Biodiversity and Sustainability (PIBS) and the Palestine
Museum of Natural History (PMNH) - Bethlehem University. Reporting Date:
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Roubina Ghattas, and Luciana Khair)***

I. Introduction:

Ecological communities maintain the ecological and evolutionary processes that sustain life. Assessing the status and trends of biodiversity is essential for sustainable development strategies at all levels, from local to national. Assessment is necessary to ensure that actions implement plans and policies achieve objectives set by the country's frameworks and the CBD (Convention of Biological Diversity) decisions. Hence, assessing the biodiversity status is a key recommendation for the CBD, since it is the means by which the Parties and others can determine how fully the CBD is being implemented at national level; what difference implementation is making to ecosystem, species, and genetic diversity; and what still needs to be done. The CBD calls specifically for identification and monitoring in Article 7—in particular to determine progress within situ conservation (Article 8), ex situ conservation (Article 9), and sustainable use of components of

biodiversity (Article 10). Finally, the CBD requires Parties to report on measures to implement the provisions of the CBD and their effectiveness in meeting the CBD's objectives (Article 26). When assessment is a regular part of the planning and action cycle, reports contribute to better decision making and effective¹.

Assessing plant biodiversity in a Palestinian context is seen as a requisite towards proper and sustainable conversation for plant species and their ecosystems. This comes in line with related National frameworks and strategies most prominently the National Biodiversity Strategy and Action Plan (NBSAPP, 1999). Several approaches can be considered when dealing with plant biodiversity assessments and monitoring, some can be done at local and some on a broader scope at national level. In the case of the project entitled: *"Biodiversity Conservation and Community Development in Al-Makhroul Valley in Bethlehem, Palestine"* that has been implemented since three year (2018-2021) by Bethlehem University under the generous support of the Drawing Initiative funding, Plant biodiversity was assessed to reveal the status of ecosystems, habitats and plant cover in the local context of Al Makhroul area after two years of conservation planning, advocacy, awareness raising and outreach. The assessment for the site was done in response to national frameworks and Biodiversity Management Plan that was set earlier by the project and endorsed by Ministry of Tourism and Antiquities of the State of Palestine. This step has come specifically to fulfil the project objective of assessing and monitoring changes that took place affecting the plant biodiversity during and at the end of the project implementation, advancing the knowledge base regarding plant biodiversity in MKV towards better understanding and effective protection for its valuable biodiversity and its supportive habitat. The consultant "Pioneer Consultancy Centre for Sustainable Development (PCC)" has developed the suitable approach to conduct the assessment and monitoring works on site referring to IUCN guidelines² while setting relevant indicators and measures at both ecosystem and habitats level and at the core species population level. At the end, this activity will help the project team to assess the conservation status of the site in line with all recommendations set by the project and interventions accomplished. All the human and environmental stresses, and drivers of change in addition to the status and trends of biodiversity components are also considered under this end line study. All this shall be accomplished with the vision of sustaining the ecosystem services of the valley and its value as World Heritage Site.

II. Methodology for Plant Biodiversity End Line Assessment at AL Makhroul Valley

¹ IUCN, 2000. IUCN Draft Test Guide to Biodiversity Assessment. April, 2000

² IUCN Draft Test Guide to Biodiversity Assessment, April, 2000

The plant biodiversity end line assessment for AL Makhroul Valley (MKV) is one of the major components of the biodiversity assessment done during the project duration, as it offers detailed information collected from the surveys on site; specifically, regarding the changes that took place at ecosystems, habitats, and species levels based on the approach adopted during the baseline surveys done in 2018/2019, where potential comparisons were possible even at transect level. During the MKV baseline survey 2018/2019 the Braun-Blanquet cover-abundance scale methodology (B&B) used to analyze vegetation cover-abundance ratings and to elucidate graphically species-environment relationships at MKV³. Using this methodology, the project team has estimated the vascular plant species cover that existed at the different selected transects (33 transects of 70*70m) (see Map 2.1 and Annex 1). Hence, the main steps taken to reassess the plant biodiversity of the site has adopted the B&B transects identified during the baseline survey. The transects were used as baseline elements for comparisons and final conclusions for the end line surveys. The same transects studied during the baseline survey were revisited at the same season and assessed for the major changes that could happen for the habitat or the species growing within each transect.

Two levels of assessment were considered so as to fully cover the potential changes, drivers of change and their adverse impacts.

1. Assessing the changes and adverse impacts happening at ecosystem and habitat level at MKV.

Under this level of assessment, the major changes that were observed on site were recorded including any type of human or natural interventions. The whole Valley and the different habitats were revisited, and any changes noticed when comparing the site with the baseline findings were recorded. The ecosystem information sheets were filled and compared with the one set during the baseline surveys (table 3.1). The plant cover density at each studied transect were recalculated and compared with the baseline calculations. The adverse impacts of these changes were also studied where possible or relevant. Some random interviews were done with the people living on site during the surveys regarding major interventions took place on site and their impacts on their lands and nature on site from their point of view.

2. Assessing the changes and adverse impacts happening at species level at MKV.

Under this level of assessment, the changes that took place on the plant species frequency of occurrence of each transect was reassessed. This assessment was done for the trees, shrubs, subshrubs, and perennial plants. Measures of biodiversity at the level of species or populations are directed towards the attainment of an index or a calculation for the number of species and their relative

³ <http://repository.naturalis.nl/document/572813>

abundances within a given studied transect. Typically, strategies for measuring biodiversity at this level involve protecting a single species. Nevertheless, this protection could help other species in different ways, such as species with similar habitat requirements, species with a large number of other species depending on it, or species with large area requirements⁴. Therefore, the project team has used measures of the number of species or their relative abundances in order to address biodiversity from species diversity to the ecosystem level with the support of the assessment done at ecosystem level addressing all types of change and interventions taking place on site. The approach consists of broad habitat protection to benefit a wide range of species as ecosystems consist of the population of all species coexisting at the site.

⁴ Noss, R., 1999. Assessing and monitoring forest biodiversity: A suggested framework and indicators. Florida Institute for Conservation Science

2.2 The Surveyed Area at Al Makhroul Valley

The surveyed area encompasses the areas already studied during the baseline survey including: (1) Al Makhroul Valley that extends from Beit Jala city to the entrance of Battir village from the western side, which forms 2.62 km², (2) the hills surrounding Battir Village from the northern and western sides of Battir and Battir village itself, which forms 2.38 km². Hence the surveyed area covered almost 5 km², which forms 45% of whole WHP (World Heritage Property) designated by UNESCO (see map 2.2). PCC focus was on the core area of the WHP. In this study MKV as an expression represents the two areas as following: AL Makhroul Valley and the hills behind Battir towards Husan village, where the inventory was conducted. Battir village was also surveyed but its results will be presented separately as it has a unique status; mainly affected by human interferences and hence its plant cover was studied independently (see section 3.3).



Map 2.2: Area covered for biodiversity endline survey done for ALMakhroul Valley and Battir village and its surrounding hills

The area surveyed starts from Beit Jala side at coordinates 31°42'52.38"N, 35°10'26.16"E reaching up to the natural valley between Battir and Husan villages at point 31°43'18.33"N, 35° 7'54.77"E, taking three paths 1, 2 and 3 (see map 2.3). The area enjoys the different potential habitats that the valley embraces and the different plant species that it supports. The length of the three paths is 7.5 Kilometers. The highest point at the studied paths was estimated at 813 meters above sea level and the lowest point reaches to an estimate of 550 meters above sea level.



Map 2.3: Paths used to support PCC team to conduct the surveys in a comprehensive geographic manner (same route used during the baseline survey).

III. Findings of the plant biodiversity end line survey done at Al Makhroul Valley – covering autumn, winter, and early spring seasons 2020/2021

3.1 Ecosystem and Habitats of Al Makhroul Valley:

Al Makhroul Valley (MKV) as described in the baseline study falls in the Mediterranean botanical and zoogeographical region⁵ and the Mediterranean biogeographical zone⁶. Al Makhroul valley is in the Mediterranean Forests, Woodland and Scrub biome, one of WWF's Global 200 priority biomes for conservation⁷. The area is a UNESCO World Heritage Site encompasses series of agricultural valleys extending along Al Makhroul Valley towards the village of Husan, encircling the village of Battir, and extending to the neighboring village of Al Walaja to the northeast. The valley enjoys the availability of springs that attracted people to settle in the area and adapts its steep landscape into

⁵ Zohary, M., (1973). Geobotanical Foundations of the Middle East. Stuttgart: B. Fischer Verlag. 739 pp

⁶ Soto-Berelov, M., Fall, P.L. & Falconer, S.E (2012). A revised map of plant geographical regions of the Southern Levant. Proceedings of the Geospatial Science Research Symposium GSR2. Melbourne.

⁷ Olson, D. M. and Dinerstein, E. (2002). The Global 200: Priority ecoregions for global conservation. Annals of the Missouri Botanical Garden 89(2): 199-224.

arable land, through developing complex irrigation system for the water supply that has led to the creation of dry walls terraces, agricultural watchtowers (manatir) locally known as palaces (qusoor), and olive presses. All were the basis for a strong presence of agriculture of olives and vegetables and others⁸. The landscapes at Al Makhrou Valley mainly the series of hills' formations, terraces (natural and man-made) and the valley that flows between the hills of each side, and the related human interventions have created the abundance of diverse habitats along the valley including the abundant agricultural lands (fallow lands), the olive groves that their owners still take care of, the abundant olive groves, the batha – garrigue associations with fairly new succession of wild plant cover, the maquis Mediterranean forest with developed succession of vegetation cover, in addition to the planted areas with mainly pine and cypress trees.

The Valley encompasses diverse habitats that supports diverse flora, fauna, and avi-fauna species. The habitats are a mixture of both natural and man-made components mainly identified as following:

1. Natural Oak forest: Sclerophyllous Broad Leaved Oak Forest and Maquis. This habitat is dominated with *Quercus calliprinos* Oak tree that supports the growth of diverse and dense batha/garrigue plant associations of mainly *Sarcopoterium spinosum*, *Cistus spp.*, *Calicotome villosa*, and *Coridothymus capitatus*. This habitat supports the growth of diverse wild Mediterranean trees such as *Rhamnus lycioides*, *Crataegus aronia*, *Pistacia Palaestina*, and the reseedling of *Pinus halepensis*, and *Pinus pinea*, in addition to diverse shrub and herbaceous species such as *Teucrium divaricatum*, *Teucrium capitatum*, *Fumana arabica*, *Andropogon distachyos* and many others.
2. Mixed natural oak and olive groves: This habitat is dominated with both oak and olive trees. The habitat supports the growth of number of trees such as *Arbutus andrachne*, *Pistacia Palaestina*, *Styrax officinalis* and number of shrubs and herbaceous species such as *Pistacia lentiscus*, *Phlomis viscosa*, *Calicotome villosa*, *Cyclamen persicum*, *Smilax aspera*, and many others.
3. Man-made planted coniferous woodland: This habitat is dominant with cultivated tree and its reseedling plants. This habitat does not support diverse plants but mainly scattered herbaceous species especially at the sides of the habitat where new habitats start to emerge.

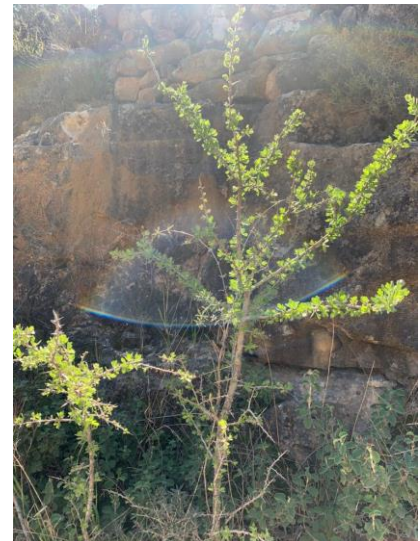
⁸ MoTA (Ministry of Tourism and Antiquities), 2013. Palestine, Land of Olives and Vines Cultural Landscape of Southern Jerusalem, Battir. World Heritage Site Nomination Document. Palestinian Ministry of Tourism and Antiquities. Department of Antiquities and Cultural Heritage Palestine.

4. Batha and Garrigue habitat: This habitat supports the growth of shrub/subshrubs and herbaceous species. Of the main species are *Phlomis viscoa*, *Cistus spp.*, *sarcopoterium spinosum*, *coridothymus capitatus*, *Calicotome villosa*, *Bellis sylvestris*, *Teucrium creticum*, and many others.
5. Fallow lands and olive groves: This habitat is mainly located at the flat lowland valley, where there are wide spread olive groves either cultivated or still taken care of by its owners as those groves are plowed lands or groves that are cultivated and left alone for one or two seasons only, or groves that were cultivated but neglected and only visited for harvesting and here the fallow land appear under or on the sides of the olive grove land. The plant associations in this habitat are *Asparagus aphyllus*, *Andropogon distachyos*, *Calicotome villosa*, *Carlina spp.*, *Arum Palaestinum*, *Malva parviflora* and many *graminae spp.* and *papilionaceae spp.* (to be classified in spring season).
6. Mixed oak and Pine forest supporting batha association, which supports diverse types of plants such as *Pistacia palaestina*, *Rhamnus Lycoides*, *Crataegus aronia*, *Teucrium capitatum*, *Thymus spicata*, *Thymbra spicata*, *Leontodon tuberosus*, and others.
7. The trench of the lowland valley (the deepest point in the valley): This trench is 5-8 meters in width, and it supports the growth of all plant forms including trees, shrubs, and herbaceous species. Of main plants are *Pistacia palaestina*, *Quercus calliprinos*, *Sarcopoterium spinosum*, *Calicotome villosa*, *cistus spp.*, *Salvia indica*, *Daucus carota*, *Phagnalon rupestre*, *Dittrichia viscosa* and many others.

According to the surveys done to assess the site overall landscapes and ecosystems, it was observed that all the above-described features were all kept intact with the support of viable ecosystems and ecosystem services. Few interventions are taking place on site that does not cause harm to the ecosystem functions, life cycles and services. All the changes taking place are of micro-impacts that does not introduce major disorderly elements for the landscapes, and the cultural elements of the site. However, these micro-impacts need to be followed and monitored by relevant stakeholders including local authorities and Ministry of Tourism and Antiquities responsible (MoTA) for maintaining and protecting the WHS outstanding features while referring to the site Management plan and the Biodiversity Management Plan (Table 3.1).

In general, the main interventions and changes are taking place in the valley of Beit Jala towards Battir city. The western hills of Battir city towards Husan village, on the other hand, are in better shape in terms of ecology integrity, plant cover density, and forest succession although there are many trees replanting activities taking place in MKV under the BU/Darwin Initiative project and others such as Caritas Jerusalem project (photos 3.6,

3.7). The maquis forest succession was seen in all over the MKV and Battir hills. The succession is mainly taking place in the form of trees reseeding mainly among natural Aleppo Pine trees *Pinus halepensis*, Hawthorn Azarole trees *Crataegus aronia*, Eastern Strawberry trees *Arbutus andrachne*, Oak trees *Quercus calliprinos*, Pistachio trees *Pistacia palaestina* and shrubs/subshrubs succession such as Lentisk *Pistacia lentiscus*, Shrubby Jerusalem Sage *Phlomis viscoa*, Rock roses *Cistus spp.*, Spiny Broom *Calicotome villosa*, Prickly Burnet *sarcopoterium spinosum*, and Headed Thyme *coridothymus capitatus*, and Palestine Buckthorn *Rhamnus lycioides* (photos 3.1, 3.2, 3.3, 3.4, 3.5).



Photos 3.1, 3.2, 3.3, 3.4, 3.5: Forest succession of trees and shrubs/subshrubs (pine trees, Eastern strawberry trees, shrubby Jerusalem sage and hawthorn azarole tree succession)



Photos 3.6, 3.7: Replanting trees at MKV

Of the major interventions that are taking place on site that need monitoring and follow up for their potential impacts causing damages and changes for the natural component of the site are the following:

1. Intense rehabilitation of terraces at Nicola Khamis Family land (between transect 1, and 4 to the south). The terraces were built as series of terraces so intact and intensive where many exterior construction materials were used such as stone and concrete. In addition, during the rehabilitation actions new soils were added to fill the built/rehabilitated terraces (soils from outside the site that could hold pathogens or new parasites or exotic plant seeds), upon which the terraces were cultivation of mainly fruit trees that are of types not grown on site before. The use of heavy mechanics on site has damaged the paths that leads to this rehabilitated piece of land. When investigating the landscape of this site, although the construction of the terraces does not violate the recommendation and guidelines set by MoTA Management Plan that calls for preserving and enhancing the status of the cultural components of the site including the terraces, but it appears that the way the terraces were built causing major change in the features and natural components of this piece of land, while also using environmental unfriendly construction materials, that distort the natural landscape feature of the site. The natural wild plants that used to grow in this piece of land were totally lost (although no rare or endemic species were growing on this site). It is worth noting that the rehabilitation actions on this land were recorded during the baseline survey too, where PCC team and BU team informed both MoTA and EQA (Environment Quality Authority) about this activity on site. An interview was done with Mrs. Nicola Khamis himself regarding his land and the rehabilitation actions

- going on site, it seems that he is totally convinced that by doing so he is maintaining and preserving his piece of land in a manner that goes in line with the natural landscape of the site. He also noted that he is helping others who own pieces of land on site to do the same as he did. He intervened in opening new path on the upper lands from his land (photos 3.8, 3.9, 3.10, 3.11, 3.12).
2. Opening a new path that links the northern hills of MKV from Beit Jala side. Mechanics were used to open it and hence all the trees and shrubs that were growing there were totally lost (no rare or endemic species were recorded there). A small car can take the path. This opens a new access to locals and tourists to reach new lands on the northern hills of MKV (photos 3.13, 3.14).





Photos 3.8, 3.9, 3.10, 3.11, 3.12: Major changes of landscapes and ecosystems of AL Makhroul Valley – Khamis Family Land (purple line in photo1 left side shows both the new path and enclaves the terraces area)



Photos 3.13, 3.14: The new opened path of MKV Northern hills of Beit Jala

3. The new Israeli Outpost constructed and its potential expansion on the confiscated lands of Al Qaysyieh family which forms almost 4250 m² of lands and is located inside the designated borders of World Heritage Property (WHP). Israeli moveable caravans were set on site with establishments of a fence and gates for the site. The targeted land is located on the top of a mountain; considered part of south western hills of the valley, most of the area is planted with apple, grapes, and peaches and rich with biodiversity (photos 3.15, 3.16).



Photos 3.15, 3.16: Israeli Outpost on south western hills of MKV from Beit Jala side

4. Rehabilitation of Beit Al Liqa Institute land at MKV. The owners rehabilitated the terraces and widened some of them and cultivated new plants mainly fruit trees and cypress. The rehabilitation on this site is less intense than rehabilitation works done at Khamis land. This site is located at southern hills after T11 above T6 (photos 3.17, 3.18).



Photos 3.17 and 3.18: Beit Al Liqa rehabilitated lands in southern hills of MKV.

5. Solid waste disposal especially along the visitors' paths. Solid waste disposal is common thing along MKV and the western hills of Battir. This is mainly caused by

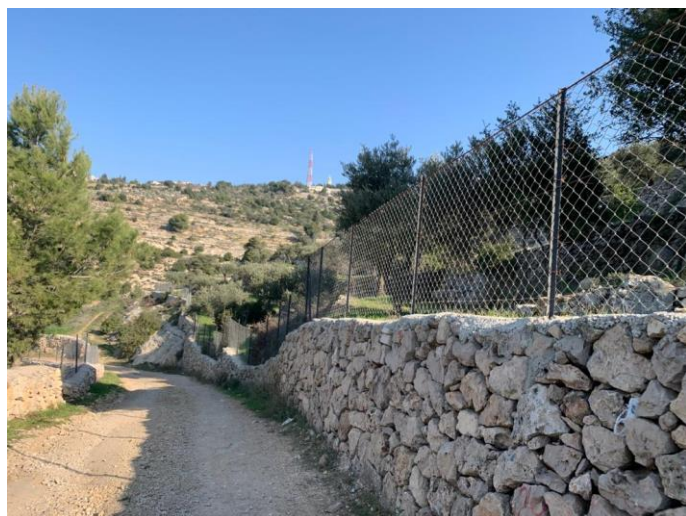
visitors, especially that the paths are accessible by cars (photos 3.19, 3.20, 3.21, and 3.22).



Photos 3.19, 3.20, 3.21, 3.22: Solid waste disposal at MKV and Battir western hills

6. Land fencing was noticed as a common activity along MKV (especially from Beit Jala side). Fencing with stone/concrete base and chain link metal fence is found common in several places, mainly fencing privately owned lands. It was noted by

a local inhabitant that the fencing actions were promote by Caritas Jerusalem, this is in addition to the installation of white-water storage tanks on rooftops or the ground (photos 3.23, 3.24).



Photos 3.23, 3.24: Fencing and water storage tanks at MKV.

Table 3.1: Ecosystem comparison field sheet

Comparison sheet	Baseline Survey 2018/2019	End line survey 2020/2021
1. The studied site name	Al Makhroul Valley and Battir WHS	Al Makhroul Valley and Battir WHS
2. The valley eco-region	Mediterranean Region (Mountainous Zone Environment) Central Highlands Range of the West Bank Region Series of hills and a valley that flows from Beit Jala city enclaving Battir villages towards Husan village	Mediterranean Region
3. The valley plant territory geo-element	Mediterranean plant geo-element	Mediterranean plant geo-element
4. The valley typology	A mix between; natural maquis forest and a man-made coniferous forest It is a Mediterranean landscape composed of different interacting vegetation patches. Pine and oak ecosystems form contiguous patches within this landscape, in pure stands, or as mixed pine–oak ecosystems. AL Makhroul landscape typically form a patch mosaic where different vegetation types are intermingled in complex patterns created by the variation in physical, biological, and anthropogenic landscape conditions. Further, the mosaics are a heterogeneous combination of both “natural” and man-made patches interleaved with one another in complex patterns that result from different	The maquis forest and the man-made coniferous forest is still intact and viable. Same landscape patches and interlinkages between different habitats. Landscape major changes were recorded at following sites: 1. The series of new terraces established at the first segment of the Al Makhroul Valley form Beit Jala Side specifically at Khamis family-owned land (between T1 and T4) to the south west of T1.

	edaphic conditions, topography, exposure to wind and sun, fire and other disturbances, and land-use histories.	<ol style="list-style-type: none"> The outpost constructed by Israeli settlers above T9 after demolishing Al Qaisyeh family restaurant and house. The rehabilitated house and terraces below main Beit Jala road opposite T9. The newly opened path that take visitors and locals to the northern hill between Beit Jala and a Walajeh village (above Khamis family land) The new series of terraces constructed at Beit Al Liqa lands at southern hills after T11 above T6. The solid waste disposal in several places along the visitors' paths, where cars can access the paths.
5. The valley density	40-93% plant density	40-93% plant density
6. The valley ecosystem habitats	<ul style="list-style-type: none"> -Maquis forest –Sclerophyllous - Broad Leaved - Oak Forest and Maquis, <i>Quercus calliprinos</i> woodland on limestone, with <i>Quercus calliprinos</i> dominant species -Man-made Coniferous forest with <i>Pinus halepensis</i> dominant species -Garrigue/Batha forest – shrublands and grasslands -Agricultural land – Olive Groves -Fallow land –abundant land -The valley (5-8ms width)– elongated lowland between the hills 	All described habitats and their corridors are kept the same with no major changes.
7. The Valley's soil	Rendzina and White rendzina especially on the northern series of hills (oriented towards the south), in some areas with patches of Terra Rossa Terra Rossa pure in patches.	Same soil type
8. The Valley's water resources	<ul style="list-style-type: none"> - Number of springs distributed along the valley such as Kabryano spring, Al A'mdan Spring, E'in El Hawieh, and others (to be collected from literature and surveys). -Water collection systems as natural and man-made rainwater harvesting systems (including cisterns and surface stone cistern) 	<p>Same resources are available.</p> <p>Springs on the site are source of attraction to the locals and visitors so major features observed near them is the disposed solid waste mainly litter, plastic utensils, and bags, barbecues' leftovers.</p> <p>There are number of bins and resting benches are installed near the springs such as at Ein A'mdan Spring which are also full of uncollected solid waste.</p>
9. The valley Surrounding environment	<ul style="list-style-type: none"> -Number of Qanateer or Castles (observed: 27 of them) -Cisterns (observed: 4) -Grottos (observed: 2) -Surrounding the valley a buffer area of agricultural lands and terraces, pieces of lands invested for eco-tourism activities such as restaurants, camping areas, etc) 	<p>All observed cultural features on site are in the same status.</p> <p>New Israeli outpost established on top of the demolished restaurant and house of Al Qaisyeh family. They paved an access road and erected a building and infrastructure. Th status of the outpost is constant until today.</p>

	<p>-It is surrounded with Palestinian localities such as Battir, Al Walaja, Husan villages and Beit Jala city; the largest Palestinian localities in the Western Bethlehem Area.</p> <p>-It is also surrounded by Israeli settlements such as Har Gilo from northern side and pass road 60 and Betar Illit and Hadar Betar settlements from southern western side which forms part of Gutsh Etzion settlement's bloc.</p> <p>-From an environmental and water perspective, the area west of Bethlehem including Al Makhroul valley and the surrounding area is considered a high-water production zone in relation to the lower part of the water aquifer.</p>	No Palestinian villages urban expansion was noticed on site.
10. Conservation programs and authority	<p>-No conservation actions are taken on the ground although it is a WHS, however a management plan was set by MoTA in a participatory approach with relevant stakeholders for the site for protecting the cultural aspect and developing the site. But there is no conservation plan specific for the biodiversity of the site.</p> <p>-Both Battir village council and Beit Jala municipality are the main authorities that the area is demarcated under their jurisdiction according to the Palestinian Local Government classification. Private ownership is prevailing at site.</p> <p>-The area is located in Geopolitical area "C"; under Israel civil and security control, makes up to 61% of West Bank. No development is allowed unless a permit is taken from Israeli side.</p>	<p>Ministry of Tourism and Antiquities (MoTA) has developed the "<i>The Management and Conservation Plan</i>" (MCP) for the site and Bethlehem University in cooperation with MoTA has developed "<i>Biodiversity Management Plan</i>" (BMP) that was endorsed by the Government in the year 2019. Both plans were set to conserve and protect the cultural and natural elements of the site under the UNESCO WHS guidelines.</p> <p>However, most of the site is privately owned properties and hence number of families has started some rehabilitation projects for their terraces, land fencing, installation of water harvesting and storage techniques (especially the installation of water tanks). These new features have changed mainly the landscape overview especially in the first segment of MKV from Beit Jala side areas between T1, T3, T9, T10 and T13. The site is still visited by local tourists even during COVID 19 pandemic but in small numbers. It is seen a refuge and an open area for recreation.</p> <p>The related ministries and authorities on site are able to follow the needs of the site but actions taken are not effective enough in monitoring and conserving the site as needed and recommended by the MCP and BMP plans. There was no management plan until the year 2018. The MCV plan is still not in action for several reasons mainly financial needs. This is in addition to number of obstacles that face those authorities while implementing any needed action especially the site is privately owned in geopolitical area C and surrounded by Israeli settlements.</p>

		<p>It was observed that there are large number of local plant cultivations taking place on site specifically as the result of number of projects as recorded by (1) Darwin Initiative project where 3 dunums were cultivated, (2) Caritas Jerusalem rehabilitation project on site.</p>
11. The valley threats	<p>There are several reasons for the deterioration of the valley, in general, performing pressure on the vegetation cover in this area, in particular, the following:</p> <p>(1) population growth and pressure, where new construction activities and restoration activities were noticed, (2) human interference where new soil is brought to the valley for the newly built terraces, in addition to replacing natural areas with agricultural lands, (3) the small fires (especially during olives' harvesting season), (4) stopping farming practices in certain areas along MKV, hence there are few segetal plants, (5) garbage and litter disposal, (6) ruderal plants are widespread along sides of the paths, (7) grazing activities were found in the valley as we found remainings of the livestock's manure and others.</p>	<p>The main threats listed in the baseline specifically the population growth, rehabilitation of new terraces with the addition of new soils, the small fires, disposal of garbage and litter, are considered as on-going threat drivers that were recorded during the end line survey. Both rehabilitation of terraces and disposal of solid waste were recorded in higher numbers and several places along the valley. The cutting of trees was noted during the end line survey especially in the hills of T21. No grazing activities were recorded during the end line survey.</p>
12. Succession	<p>Different levels of successions in different landscape patches. In general plant succession is most prominent on the series of mountains that face the north, as the slopes of those mountains are deeply steep, hence they face less human interference (no land uses), they have more humus, enjoys higher humidity and hence more dense vegetation cover.</p> <p>Some phenomenae were noticed during the field surveys regarding the presence or absence of some plant species, where the reason behind their occurrence status is not clear; as following:</p> <p>Wild thyme - <i>Majorana syriaca</i> (<i>Origanum syriacum</i>) was found in low numbers, low frequency and small populations.</p> <p>Carob tree - <i>Ceratonia siliqua</i> was found in low numbers, low frequency and specific locations</p> <p>Greek Sage - <i>Salvia fruticosa</i> was found in low numbers and very low frequency.</p> <p>Lentisk - <i>Pistacia lentiscus</i> was found growing in the valley from Beit Jala side, on a land of high elevation if compared to the land elevation suitable for the growth of this plant. Usually the Lentisk shrubs prefer lower elevations (than the place it was found growing in) and warmer climates. However, the area where the shrub was found growing in abundantly is almost 800 meters above sea level but still the Lentisk grows there!</p> <p>Officinal Storax - <i>Styrax officinalis</i> was found in few places mainly in (T 9 and T10).</p>	<p>Succession of maquis forest and the reseedling of pine trees were prominently recorded during the end line survey. The maquis forest succession was mainly manifested by the growth of hawthorn and strawberry trees, and number of shrubs/subshrubs such as lentisk, shrubby phlomis, prickly burnet, rockrose, and spiny broom.</p> <p>Pine trees reseedling was highly recorded especially in MKV (T4 and T5), and western hills of Battir (T27, T28, T29).</p> <p>The carob, terebinth tree, official styrax, sumach, Syrian pear, common almond, Aleppo pine, and germanders, were all recorded in same status in the valley.</p> <p>Hawthorn, eastern strawberry, oak trees, lentisk, shrubby phlomis, spiny broom, and rockrose shrubs were found in higher numbers in the valley and western hills of Battir.</p> <p>No <i>Phragmites</i>, <i>Cyperus</i>, <i>Juncus</i> or <i>Arundo</i> spp. were recorded on site during the end line survey.</p>

	<i>Phragmites australis</i> , <i>Arundo donax</i> was not found at all although there are some places along the valley where water is collected and springs are found! <i>Cyperus rotundus</i> and <i>Juncus acutus</i> were also not found while it was expected to find them in the valley especially near springs, and humid areas.	
13. notes	- <i>Quercus calliprinos</i> forest of high nature conservation value in the Mediterranean region. Sclerophyllous oak forests are an important ecosystem type of the natural vegetation in the Mediterranean region. As a part of the mosaic-like landscape, old-growth oak forests, in particular, provide a wide range of ecosystem functions and services. The site supports different micro-environments that support the growth of diverse plant species of different life forms and distribution at the site	<i>Same importance and significance</i>
14. General plant cover observed during the exploration visit to the Valley's ecosystem	Plant species that were identified during the exploration visit are listed in Annex 3.1- Plant species identified at Al Makhrouir Valley till date of the report.	The trees, shrubs/subshrubs and perennials that were studied at transect level during the end line survey were recorded in Annex 1

3.2 The Results of the Plant Cover End line survey done at species level (Vascular Plants):

During the baseline survey a total of 417 vascular plant species were recorded of the flora survey at MKV (AL Mkahour Valley and hills behind Battir towards Husan village) during the report period. The area clearly hosts high number of vascular plants; as the results of the diverse habitats, which forms a supporting environment for the growth of diverse plant species. The valley supports the growth of 63 plant families; most dominantly are Compositae, Papilionaceae, Labiatae, Graminae and Cruciferaceae. The total number of tree species surveyed at the valley is 17 trees, while the valley encompasses 47 shrubs and sub-shrubs, 2 aquatic plants, and 351 herbaceous plant species.

During the end line survey, the main dominant species, and their plant associations (mainly Oak trees *Quercus calliprinos*, Aleppo Pine trees *Pinus halepensis*, and Olive trees *Olea europea* and others such as *Pistacia palaestina*, Strawberry trees *Arbutus andrachne*, Carob trees *Ceratonia siliqua*, Stone Pine trees *Pinus pinea*, Cypress trees *Cupressus sempervirens*, Hawthorn Azarole trees *Crataegus aronia*) were found intact and stable in their frequency of occurrence. No major cutting incidence was recorded except at one site near E'in E'mdan spring T21 for pine trees (photo 3.25, 3.26).



Photo 3.25, 3.26: Trees cutting incidence recorded at MKV (hills of T21).

Rare, endemic species and wild relatives were all recorded in the end line survey in same places and transects and no changes are found of significance (Table 3.2), however, the *Ophrys spp.* were found in higher numbers especially near paths below T5 towards T6; specifically, both *Ophrys israelitica* (*Ophrys fleischmannii*) and *Ophrys sphegodes* (*ophrys transhyrcana*) and also *Anacamptis papilionacea* (*Orchis papilionacea*) was found in higher number especially in T29 and its nearby paths (Photos 3.27, 3.28). *Arum hygrophilum* of the plants that was found only in one site in Battir near the water stream during the baseline survey. It is the only species that was noticed missing and not found/recorded at Battir during the end line survey. There could be several reasons behind this, the whole place is highly populated with dense vegetation cover, the survey season would show only the plant in its vegetation status and not flowering status. Another visit to the site during the month of April is worth it to record the existence of this plant.



Photos 3.27, 3.28: *Ophrys* spp. found near flowering status in MKV and (Below T5 towards T6 near the path) and *Anacamptis papilionacea* found in T29 in flowering status.

Table 3.2: Endemic species found at MKV and status in end line survey⁹.

Family	Species name	Endemism	Abundance at local level	Abundance (IUCN Red List)	End line Survey	Occurrence
Amaryllidaceae	<i>Vagaria parviflora</i> (<i>Pancratium parviflora</i>)	ES	F	LC	Same status (SS)	Path after T20 (along the stairs)
Araceae	<i>Biarum angustatum</i>	ET	F (LD)	-	SS	T12

⁹ Ad1 (abundance at local level, according to Checklist and Ecological Database⁹): CC=Very common species, C=Common species, F=Frequent species, R=somewhat rare species, NR= Not Registered in the study area before but found during surveys, (LD)= species with limited distribution
 Abd2 (abundance at global level, according to IUCN RED List⁹): LC= Least Concern, VU= Vulnerable - decreasing
 End= Endemism, EP=Endemic to Palestine, ET=Endemic to Palestine and Turkey, EL=Endemic to Palestine and Lebanon, ES=Endemic to Palestine and Syria
 SS: Same Status. Existing in same small numbers in same location.

Boraginaceae	<i>Alkanna strigosa</i>	ET	C	-	SS	T22
	<i>Echium judaeum</i>	ES	CC	-	SS	T12, T15, T16, T27
	<i>Nonea philistaea</i>	EP	C(LD)	-	SS	Path behind Battir Village towards T26
Campanulaceae	<i>Campanula hierosolymitana</i>	EL	C(LD)	-	SS	Path Below T14
	<i>Campanula stellaris</i>	EL	C(LD)	-	SS	Path Below T14
Colchicaceae	<i>Colchium hierosolymitanum</i>	ET	R	-	SS	Path towards T17 on left side of the path there are high rocks with microenvironments for lithophyte plants
Compositae	<i>Anthemis bornmuelleri</i> (<i>Anthemis galilaea</i>)	ES	CC	-	SS	On the way down hill from Beit Jala side
	<i>Calendula palaestina</i>	EL	C(LD)	-	SS	In agricultural Lands of Battir Village above railway
	<i>Centaurea cyanoides</i>	ES	C(LD)	-	SS	Path between T26 and T27
	<i>Onopordum carduiforme</i> (<i>Onopordum telavivense</i>)	EP	RP	-	SS	T26
Iridaceae	<i>Crocus hyemalis</i>	ES	C	LC	SS	T29, T30, on the path towards T17 on the rock side of the path
Labiatae	<i>Salvia hierosolymitana</i>	ES	C (LD)	-	SS	T32
	<i>Salvia judaica</i>	ES	C	-	SS	Path between T28 and T29
	<i>Salvia pinnata</i>	ET	C (LD)	-	SS	Path between T28 and T29
Liliaceae	<i>Bellevalia eigii</i>	EE	F	-	SS	T4 and T8
	<i>Bellevalia flexuosa</i>	ES	CC	-	SS	T2, T8 and on path above T19
Papilionaceae	<i>Trifolium eriosphaerum</i>	ES	C	-	SS	T12, T13, T14
	<i>Trifolium erubescens</i>	EL	C(LD)	-	SS	path before T26
	<i>Trifolium scutatum</i>	ET	R	-	SS	T32
	<i>Trigonella berythea</i>	ET	F	-	SS	On path towards T22
Resedaceae	<i>Reseda alopecuroides</i>	EP	R	-	SS	After T20 btowards Battir village
Scrophulariaceae	<i>Scrophularia hierochuntina</i>	ES	RP	-	SS	T26
	<i>Scrophularia rubicaulis</i>	ES	F	-	SS	On the way towards T26
Umbelliferae	<i>Chaetosciadium trichospermum</i>	ES	CC	-	SS	T8 and T9

The plant cover density of the studied transects were estimated at same rates in the end line survey, except few transects (Table 3.3). In general, the western hills of Battir shows higher plant density than the MKV (the valley extends from Beit Jala to Battir city). Several transects in MKV were recorded of same plant cover density however T6, T7, T10, T21, and T28, 29, 30, and 31 had higher plant density. The main plants that show higher occurrence at the valley are *Pinus halepensis*, *Arbutus andrachne*, *Calicotome villosa*, and *Cistus salviifolius* (Table 3.3).

Table 3.3: Plant cover density at each studied transect during the end line report period.

Transect no.	Plant Density - Baseline	Plant Density - End line	Plant species of higher frequency of occurrence	Transect no.	Plant Density - Baseline	Pant Density - End line	Plant species of higher frequency of occurrence
T1	Q1: 65% Q2: 60% Q3: 65% Q4: 60%	Q1: 65% Q2: 60% Q3: 65% Q4: 60%	--	T17	Q1: 70%	Q1: 70%	--
T2	Q1: 70% Q2: 75%	Q1: 70% Q2: 75%	--	T18	Q1: 75%	Q1: 75%	<i>Olea europaea</i>
T3	Q1: 80% Q2: 80%	Q1: 80% Q2: 80%	--	T19	Q1: 68%	Q1: 68%	
T4	Q1: 80% Q2: 80% Q3: 80%	Q1: 85% Q2: 85% Q3: 85%	<i>Pinus halepensis</i> , <i>Cistus salviifolius</i>	T20	Q1: 75% Q2: 77% Q3: 57%	Q1: 75% Q2: 80% Q3: 57%	<i>Pinus halepensis</i>
T5	Q1: 80% Q2: 80%	Q1: 85% Q2: 85%	<i>Pinus halepensis</i> , <i>Arbutus andrachne</i> , <i>Calicotome villosa</i>	T21	Q1: 69%	Q1: 75%	<i>Arbutus andrachne</i> , <i>Micromeria nervosa</i> , <i>Pinus halepensis</i> , <i>Pistacia palaestina</i> , <i>Sedum sediforme</i>
T6	Q1: 40% Q2: 80%	Q1: 40% Q2: 87%	<i>Phlomis viscosa</i> , <i>calicotome villosa</i> , <i>Arbutus andrachne</i> , <i>Pistacia palaestina</i> , <i>Sarcopoterium spinosum</i>	T22	Q1: 73% Q2: 65%	Q1: 73% Q2: 65%	--
T7	Q1: 90% Q2: 90%	Q1: 95% Q2: 95%	<i>Arbutus andrachne</i> , <i>Quercus calliprinos</i> , <i>Phlomis viscosa</i> , <i>Pinus halepensis</i> , <i>Rhamnus lycoides</i>	T23	Q1: 65% Q2: 67% Q3: 70%	Q1: 65% Q2: 67% Q3: 70%	--
T8	Q1: 60% Q2: 60%	Q1: 60% Q2: 60%	--	T24	Q1: 62%	Q1: 62%	--
T9	Q1: 70% Q2: 70%	Q1: 75% Q2: 75%	<i>Teucrium capitatum</i> , <i>Ramnus lycoides</i> , <i>cistus salviifolius</i> , <i>cistus</i>	T25	Q1: 60%	Q1: 60%	--

			<i>creticus, calicotome villosa</i>				
T10	Q1: 80% Q2: 70%	Q1: 80% Q2: 75%	<i>Pinus halepensis, sarcopoterium spinosum, Phlomis viscosa, Thrinia tuberosa</i>	T26	Q1: 60% Q2: 65%	Q1: 60% Q2: 67%	<i>Amygdalus communis, Pinus halepensis, Coridothymus capitatus, Sarcopoterium spinosum</i>
T11	Q1: 85%	Q1: 87%	<i>Quercus calliprinos, Andropogon distachys, Cistus salviifolius and creticus, Sarcopoterium spinosum</i>	T27	Q1: 82%	Q1: 85%	<i>Calicotome villosa, Amygdalus communis, Asphodelus ramosus, Cyclamen persicum</i>
T12	Q1: 70% Q2: 60%	Q1: 70% Q2: 60%	<i>Foeniculum vulgare</i>	T28	Q1: 80% Q2: 69%	Q1: 83% Q2: 72%	<i>Calicotome villosa, Pistacia lentiscus, Asphodelus ramosus, Sarcopoterium spinosum, Pinus halepensis, Andropogon distachys</i> Missing plant : <i>Phalaris aquatica</i>
T13	Q1: 80%	Q1: 80%	--	T29	Q1: 78% Q2: 75%	Q1: 83% Q2: 80%	<i>Calicotome villosa, Cistus salviifolius, Pinus halepensis, Smilax aspera, crataegus aronia, Anacamptis papilionaea</i>
T14	Q1: 70% Q2: 70%	Q1: 70% Q2: 70%	--	T30	Q1: 75% Q2: 80%	Q1: 80% Q2: 83%	<i>Calicotome villosa, Quercus calliprinos, Pinus halepensis, Arbutus andrachne, Cistus salviifolius, Pistacia lentiscus, Rhus coriaria, Coridothymus capitatus</i>
T15	Q1: 80% Q2: 83% Q3: 75%	Q1: 80% Q2: 83% Q3: 75%	--	T31	Q1: 60% Q2: 58%	Q1: 65% Q2: 63%	<i>Ephedra aphylla, Pinus halepensis, Pistacia palaestina, calicotome villosa, Coridothymus capitatus</i>
T16	Q1: 52%	Q1: 55%	<i>Andropogon distachys, Asphodelus ramosus, Cistus creticus</i>	T32	Q1: 58%	Q1: 58%	--
T33	Q1: 57%	Q1: 57%	--				

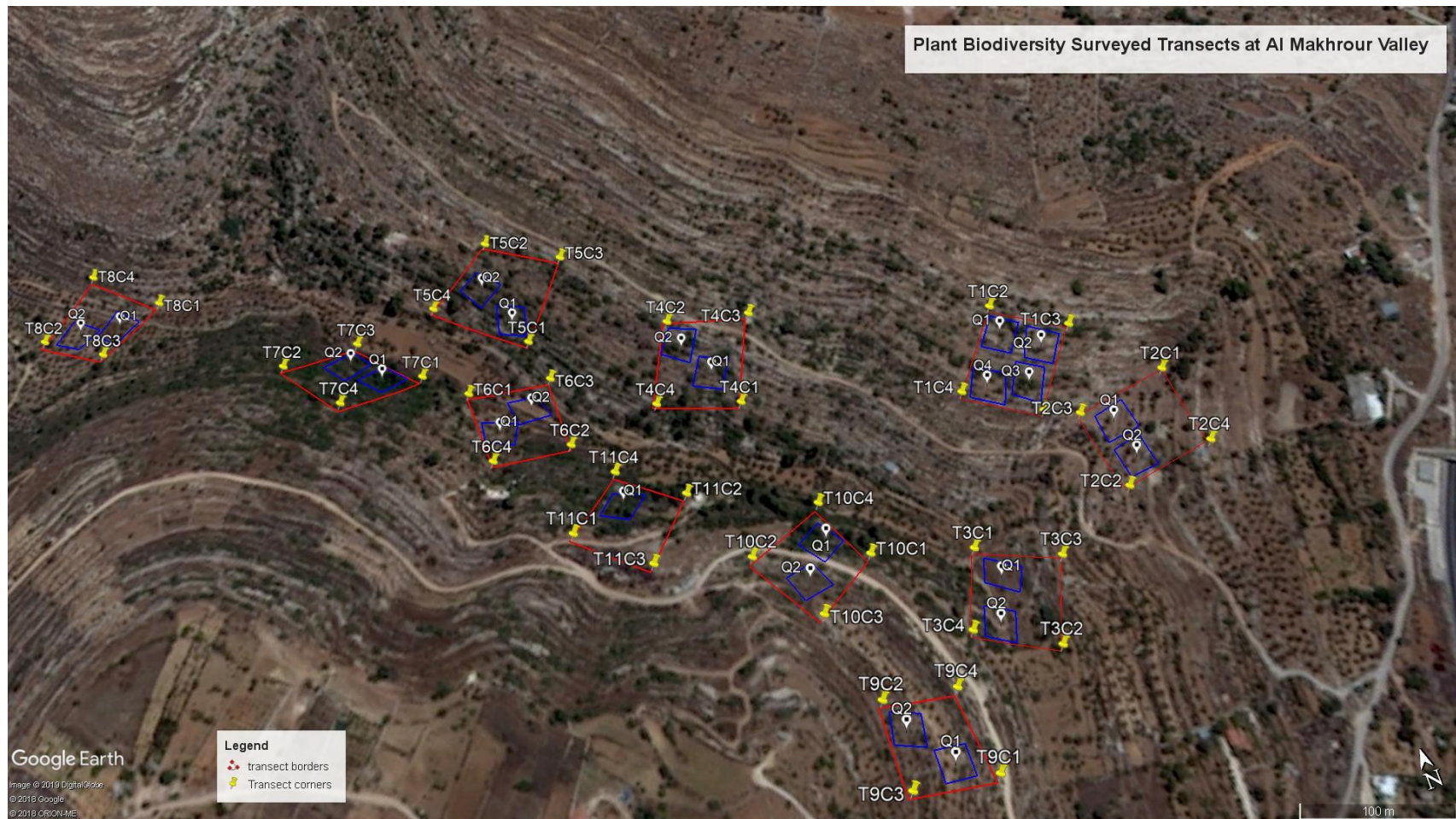
The plant species that were found in higher numbers due to natural succession and reseeded are pine, oak, Eastern strawberry, hawthorn,

The detailed section showing the maps for the distribution of studied transects and their quadrats representing the estimated cover according to Braun and Blanquet scale at the different surveyed transects for both baseline and end line surveys are listed under Annex 1. Coordinates of studied transects are summarized in Annex 2.

V. References:

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Annex 1: Detailed findings of Braun and Blanquet surveys for MKV done for both baseline and end line surveys.
(The changes between baseline and end line are shaded in yellow)



Map 3.1: Presents the distribution and geo-location of the studied transects T1, T2, T3, T4, T5, T6, T7, T8, T9, T10, and T11 and their quadrats at MKV- (Beit Jala city from eastern side). Same transects were studied during both baseline and end line surveys.

*List of species and their estimated B&B cover by surveyed transects along the Al-Makhrour Valley.
A comparison sheet between baseline and end line surveys*

Transect	Transect 1 (T1) Northern hill from Beit Jala side – path 1				Transect 2 (T2) Beit Jala side –path 1		Transect 3 (T3) Lowland Valley between series of hills (northern, southern and eastern hills) from Beit Jala side – path 1									
	Q1	Q2	Q3	Q4	Q1	Q2	Q1	Q2								
Soil type	Rendzina soil with accumulation of Humus	Rendzina soil with accumulation of Humus	Rendzina soil with accumulation of Humus	Rendzina soil with accumulation of Humus	Alluvial soil, lots of humus and remaining of compost	Alluvial soil	Rendzina soil	Rendzina soil								
Habitat	maquis oak forest (startup of succession) with bath and Garrigue association	maquis forest (startup of succession) with bath and Garrigue association	maquis forest (startup of succession) with bath and Garrigue association	maquis forest (startup of succession) with bath and Garrigue association	Maquis oak forest, fallow land, and olive groves	Olive groves and fallow land, lots of humus	Bath and garrigue association, fallow land, and olive groves	Bath and garrigue association, fallow land, and olives groves								
Plant cover	Baseline: 65% plant cover End line: 65% plant cover	Baseline: 60% plant cover End line: 60%	Baseline: 60% plant cover End line: 60%	Baseline: 65% plant cover End line: 65%	Baseline: 70% plant cover End line: 70%	Baseline: 75% plant cover End line: 75%	Baseline: 80% plant cover End line: 80%	Baseline: 80% plant cover End line: 80% plant cover								
Elevations above sea level	793m	789m	790m	776m	781	771	736m	740m								
Slope	moderate steep	moderate steep	moderate steep	moderate steep	Steep	steep	flat	flat								
Species	Braun and Blanquet scale															
	Base	End	Base	End	Base	End	Base	End	Base	End	Base	End	Base	End	Base	End
<i>Allium neapolitanum</i>	-	-	+(<1%)	+(<1%)	-	-	-	-	-	-	-	-	+(<1%)	+(<1%)	-	-
<i>Anacamptis papilionacea</i> (<i>Orchis papilionacea</i>)	-	-	-	-	-	-	-	-	-	-	+(<1%)	+(<1%)	-	-	-	-
<i>Andropogon distachyos</i>	2(10%)	2(10%)	2(10%)	2(10%)	2(10%)	2(10%)	2(10%)	2(10%)	+(<1%)	+(<1%)	-	-	+(<1%)	+(<1%)	+(<1%)	+(<1%)

Transect	Transect 1 (T1) Northern hill from Beit Jala side – path 1				Transect 2 (T2) Beit Jala side –path 1		Transect 3 (T3) Lowland Valley between series of hills (northern, southern and eastern hills) from Beit Jala side – path 1										
	Q1	Q2	Q3	Q4	Q1	Q2	Q1	Q2									
Soil type	Rendzina soil with accumulation of Humus	Rendzina soil with accumulation of Humus	Rendzina soil with accumulation of Humus	Rendzina soil with accumulation of Humus	Alluvial soil, lots of humus and remaining of compost	Alluvial soil	Rendzina soil	Rendzina soil									
Habitat	maquis oak forest (startup of succession) with bath and Garrigue association	maquis forest (startup of succession) with bath and Garrigue association	maquis forest (startup of succession) with bath and Garrigue association	maquis forest (startup of succession) with bath and Garrigue association	Maquis oak forest, fallow land, and olive groves	Olive groves and fallow land, lots of humus	Bath and garrigue association, fallow land, and olive groves	Bath and garrigue association, fallow land, and olives groves									
Plant cover	Baseline: 65% plant cover End line: 65% plant cover	Baseline: 60% plant cover End line: 60%	Baseline: 60% plant cover End line: 60%	Baseline: 65% plant cover End line: 65%	Baseline: 70% plant cover End line: 70%	Baseline: 75% plant cover End line: 75%	Baseline: 80% plant cover End line: 80%	Baseline: 80% plant cover End line: 80% plant cover									
Elevations above sea level	793m	789m	790m	776m	781	771	736m	740m									
Slope	moderate steep	moderate steep	moderate steep	moderate steep	Steep	steep	flat	flat									
Species	Braun and Blanquet scale																
	Base	End	Base	End	Base	End	Base	End	Base	End	Base	End	Base	End	Base	End	
<i>Anemone coronaria</i>	+($<1\%$)	+($<1\%$)	-	-	-	-	-	-	-	-	+($<1\%$)	+($<1\%$)	-	-	-	-	
<i>Asparagus aphyllus</i>	+($<1\%$)	+($<1\%$)	1(5%)	1(5%)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	
<i>Bellis sylvestris</i>	+($<1\%$)	+($<1\%$)	-	-	-	-	+($<1\%$)	+($<1\%$)	-	-	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	-	-	
<i>Bellevalia flexuosa</i>	-	-	-	-	-	-	-	-	-	-	+($<1\%$)	+($<1\%$)	-	-	-	-	
<i>Calicotome villosa</i>	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	2(5%)	2(5%)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	-	-	+($<1\%$)	+($<1\%$)	2(10%)	2(10%)	
<i>Carlina hispanica</i>	+($<1\%$)	+($<1\%$)	1(5%)	1(5%)	-	-	+($<1\%$)	+($<1\%$)	-	-	-	-	-	-	-	-	

Transect	Transect 1 (T1) Northern hill from Beit Jala side – path 1				Transect 2 (T2) Beit Jala side –path 1				Transect 3 (T3) Lowland Valley between series of hills (northern, southern and eastern hills) from Beit Jala side – path 1							
	Q1		Q2		Q3		Q4		Q1		Q2		Q1		Q2	
Soil type	Rendzina soil with accumulation of Humus		Rendzina soil with accumulation of Humus		Rendzina soil with accumulation of Humus		Rendzina soil with accumulation of Humus		Alluvial soil, lots of humus and remaining of compost		Alluvial soil		Rendzina soil		Rendzina soil	
Habitat	maquis oak forest (startup of succession) with bath and Garrigue association		maquis forest (startup of succession) with bath and Garrigue association		maquis forest (startup of succession) with bath and Garrigue association		maquis forest (startup of succession) with bath and Garrigue association		Maquis oak forest, fallow land, and olive groves		Olive groves and fallow land, lots of humus		Bath and garrigue association, fallow land, and olive groves		Bath and garrigue association, fallow land, and olives groves	
Plant cover	Baseline: 65% plant cover End line: 65% plant cover		Baseline: 60% plant cover End line: 60%		Baseline: 60% plant cover End line: 60%		Baseline: 65% plant cover End line: 65%		Baseline: 70% plant cover End line: 70%		Baseline: 75% plant cover End line: 75%		Baseline: 80% plant cover End line: 80%		Baseline: 80% plant cover End line: 80% plant cover	
Elevations above sea level	793m		789m		790m		776m		781		771		736m		740m	
Slope	moderate steep		moderate steep		moderate steep		moderate steep		Steep		steep		flat		flat	
Species	Braun and Blanquet scale															
	Base	End	Base	End	Base	End	Base	End	Base	End	Base	End	Base	End	Base	End
<i>Carlina curetum</i>	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	-	-	+($<1\%$)	+($<1\%$)	-	-	-	-	-	-	-	-
<i>Cistus salvīfolius</i>	2(15%)	2(15%)	2(10%)	2(10%)	3(25%)	3(25%)	3(27%)	3(27%)	-	-	1($<5\%$)	1($<5\%$)	+($<1\%$)	+($<1\%$)	2(15%)	2(15%)
<i>Coridothymus capitatus</i>	2(10%)	2(10%)	3(25%)	3(25%)	3(25%)	3(25%)	-	-	-	-	-	-	-	-	-	-
<i>Crataegus aronia</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	+($<1\%$)	+($<1\%$)	-
<i>Cyclamen persicum</i>	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	-	-	1(5%)	1(5%)	1($<5\%$)	1($<5\%$)	+($<1\%$)	+($<1\%$)	1(5%)	1(5%)	+($<1\%$)	+($<1\%$)
<i>Dittrichia viscosa</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+($<1\%$)	+($<1\%$)

Transect	Transect 1 (T1) Northern hill from Beit Jala side – path 1				Transect 2 (T2) Beit Jala side –path 1			Transect 3 (T3) Lowland Valley between series of hills (northern, southern and eastern hills) from Beit Jala side – path 1												
	Q1		Q2		Q3		Q4		Q1		Q2		Q1		Q2					
Soil type	Rendzina soil with accumulation of Humus		Rendzina soil with accumulation of Humus		Rendzina soil with accumulation of Humus		Rendzina soil with accumulation of Humus		Alluvial soil, lots of humus and remaining of compost		Alluvial soil		Rendzina soil		Rendzina soil					
Habitat	maquis oak forest (startup of succession) with bath and Garrigue association		maquis forest (startup of succession) with bath and Garrigue association		maquis forest (startup of succession) with bath and Garrigue association		maquis forest (startup of succession) with bath and Garrigue association		Maquis oak forest, fallow land, and olive groves		Olive groves and fallow land, lots of humus		Bath and garrigue association, fallow land, and olive groves		Bath and garrigue association, fallow land, and olives groves					
Plant cover	Baseline: 65% plant cover End line: 65% plant cover		Baseline: 60% plant cover End line: 60%		Baseline: 60% plant cover End line: 60%		Baseline: 65% plant cover End line: 65%		Baseline: 70% plant cover End line: 70%		Baseline: 75% plant cover End line: 75%		Baseline: 80% plant cover End line: 80%		Baseline: 80% plant cover End line: 80% plant cover					
Elevations above sea level	793m		789m		790m		776m		781		771		736m		740m					
Slope	moderate steep		moderate steep		moderate steep		moderate steep		Steep		steep		flat		flat					
Species	Braun and Blanquet scale																			
	Base		End		Base		End		Base		End		Base		End		Base		End	
<i>Echinops polyceras</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	+($<1\%$)	+($<1\%$)	-	-			
<i>Eryngium cretium</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+($<1\%$)	+($<1\%$)			
<i>Hordeum bulbosum</i>	-	-	-	-	-	-	-	-	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)			
<i>Fumana Arabica</i>	+($<1\%$)	+($<1\%$)	1(5%)	1(5%)	-	-	1(5%)	1(5%)	-	-	-	-	-	-	-	-	-	-		
<i>Thymbra spicata</i>	1(5%)	1(5%)	+($<1\%$)	+($<1\%$)	2(10%)	2(10%)	+($<1\%$)	+($<1\%$)	-	-	+($<1\%$)	+($<1\%$)	-	-	-	+($<1\%$)	+($<1\%$)			
<i>Olea europaea</i>	+($<1\%$)	+($<1\%$)	-	-	-	-	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	4(70%)	4(70%)	+($<1\%$)	+($<1\%$)	-	-	-	-		

Transect	Transect 1 (T1) Northern hill from Beit Jala side – path 1				Transect 2 (T2) Beit Jala side –path 1			Transect 3 (T3) Lowland Valley between series of hills (northern, southern and eastern hills) from Beit Jala side – path 1								
	Q1		Q2		Q3		Q4		Q1		Q2		Q1		Q2	
Soil type	Rendzina soil with accumulation of Humus		Rendzina soil with accumulation of Humus		Rendzina soil with accumulation of Humus		Rendzina soil with accumulation of Humus		Alluvial soil, lots of humus and remaining of compost		Alluvial soil		Rendzina soil		Rendzina soil	
Habitat	maquis oak forest (startup of succession) with bath and Garrigue association		maquis forest (startup of succession) with bath and Garrigue association		maquis forest (startup of succession) with bath and Garrigue association		maquis forest (startup of succession) with bath and Garrigue association		Maquis oak forest, fallow land, and olive groves		Olive groves and fallow land, lots of humus		Bath and garrigue association, fallow land, and olive groves		Bath and garrigue association, fallow land, and olives groves	
Plant cover	Baseline: 65% plant cover End line: 65% plant cover		Baseline: 60% plant cover End line: 60%		Baseline: 60% plant cover End line: 60%		Baseline: 65% plant cover End line: 65%		Baseline: 70% plant cover End line: 70%		Baseline: 75% plant cover End line: 75%		Baseline: 80% plant cover End line: 80%		Baseline: 80% plant cover End line: 80% plant cover	
Elevations above sea level	793m		789m		790m		776m		781		771		736m		740m	
Slope	moderate steep		moderate steep		moderate steep		moderate steep		Steep		steep		flat		flat	
Species	Braun and Blanquet scale															
	Base	End	Base	End	Base	End	Base	End	Base	End	Base	End	Base	End	Base	End
<i>Phagnalon rupestre</i>	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	-	-	-	-	-	-	-	-	-	-	-	-
<i>Pinus halepensis</i>	+($<1\%$)	+($<1\%$)	-	-	-	-	+($<1\%$)	+($<1\%$)	1(5%)	1(5%)	-	-	-	-	-	-
<i>Pistacia lentiscus</i>	-	-	-	-	-	-	+($<1\%$)	+($<1\%$)	-	-	-	-	-	-	-	-
<i>Pistacia palaestina</i>	-	-	-	-	-	-	-	-	-	-	2(20%)	2(20%)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)
<i>Phalaris aquatica (tuberosa)</i>	-	-	-	-	-	-	-	-	-	-	-	-	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)

Transect	Transect 1 (T1) Northern hill from Beit Jala side – path 1				Transect 2 (T2) Beit Jala side –path 1			Transect 3 (T3) Lowland Valley between series of hills (northern, southern and eastern hills) from Beit Jala side – path 1								
	Q1		Q2		Q3		Q4		Q1		Q2		Q1		Q2	
Soil type	Rendzina soil with accumulation of Humus		Rendzina soil with accumulation of Humus		Rendzina soil with accumulation of Humus		Rendzina soil with accumulation of Humus		Alluvial soil, lots of humus and remaining of compost		Alluvial soil		Rendzina soil		Rendzina soil	
Habitat	maquis oak forest (startup of succession) with bath and Garrigue association		maquis forest (startup of succession) with bath and Garrigue association		maquis forest (startup of succession) with bath and Garrigue association		maquis forest (startup of succession) with bath and Garrigue association		Maquis oak forest, fallow land, and olive groves		Olive groves and fallow land, lots of humus		Bath and garrigue association, fallow land, and olive groves		Bath and garrigue association, fallow land, and olives groves	
Plant cover	Baseline: 65% plant cover End line: 65% plant cover		Baseline: 60% plant cover End line: 60%		Baseline: 60% plant cover End line: 60%		Baseline: 65% plant cover End line: 65%		Baseline: 70% plant cover End line: 70%		Baseline: 75% plant cover End line: 75%		Baseline: 80% plant cover End line: 80%		Baseline: 80% plant cover End line: 80% plant cover	
Elevations above sea level	793m		789m		790m		776m		781		771		736m		740m	
Slope	moderate steep		moderate steep		moderate steep		moderate steep		Steep		steep		flat		flat	
Species	Braun and Blanquet scale															
	Base		End		Base		End		Base		End		Base		End	
<i>Poa bulbosa</i>	-	-	-	-	-	-	-	-	-	-	-	-	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)
<i>Podonosma orientalis</i>	-	-	-	-	-	-	-	-	-	-	+($<1\%$)	+($<1\%$)	-	-	+($<1\%$)	+($<1\%$)
<i>Quercus calliprinos</i>	2(10%)	2(10%)	2(10%)	2(10%)	2(10%)	2(10%)	2(10%)	2(10%)	3(35%)	3(35%)	1(5%)	1(5%)	+($<1\%$)	+($<1\%$)	1(<5%)	1(<5%)
<i>Rhamnus lycioides</i>	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	-	-	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)
<i>Rubia tenuifolia</i>	-	-	-	-	-	-	-	-	-	-	-	-	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)

Transect	Transect 1 (T1) Northern hill from Beit Jala side – path 1				Transect 2 (T2) Beit Jala side –path 1		Transect 3 (T3) Lowland Valley between series of hills (northern, southern and eastern hills) from Beit Jala side – path 1									
	Q1	Q2	Q3	Q4	Q1	Q2	Q1	Q2								
Soil type	Rendzina soil with accumulation of Humus	Rendzina soil with accumulation of Humus	Rendzina soil with accumulation of Humus	Rendzina soil with accumulation of Humus	Alluvial soil, lots of humus and remaining of compost	Alluvial soil	Rendzina soil	Rendzina soil								
Habitat	maquis oak forest (startup of succession) with bath and Garrigue association	maquis forest (startup of succession) with bath and Garrigue association	maquis forest (startup of succession) with bath and Garrigue association	maquis forest (startup of succession) with bath and Garrigue association	Maquis oak forest, fallow land, and olive groves	Olive groves and fallow land, lots of humus	Bath and garrigue association, fallow land, and olive groves	Bath and garrigue association, fallow land, and olives groves								
Plant cover	Baseline: 65% plant cover End line: 65% plant cover	Baseline: 60% plant cover End line: 60%	Baseline: 60% plant cover End line: 60%	Baseline: 65% plant cover End line: 65%	Baseline: 70% plant cover End line: 70%	Baseline: 75% plant cover End line: 75%	Baseline: 80% plant cover End line: 80%	Baseline: 80% plant cover End line: 80% plant cover								
Elevations above sea level	793m	789m	790m	776m	781	771	736m	740m								
Slope	moderate steep	moderate steep	moderate steep	moderate steep	Steep	steep	flat	flat								
Species	Braun and Blanquet scale															
	Base	End	Base	End	Base	End	Base	End	Base	End	Base	End	Base	End	Base	End
<i>Sarcopoterium spinosum</i>	3(30%)	3(30%)	1(5%)	1(5%)	+(<1%)	+(<1%)	3(30%)	3(30%)	2(25%)	2(25%)	1(5%)	1(5%)	1(5%)	1(5%)	3(<50%)	3(<50%)
<i>Sedum sediforme</i>	-	-	-	-	+(<1%)	+(<1%)	-	-	-	-	-	-	-	-	-	-
<i>Smilax aspera</i>	-	-	-	-	-	-	-	-	+(<1%)	+(<1%)	-	-	+(<1%)	+(<1%)	+(<1%)	+(<1%)
<i>Teucrium capitatum</i>	-	-	-	-	-	-	-	-	1(5%)	1(5%)	+(<1%)	+(<1%)	-	-	-	-
<i>Teucrium creticum</i>	+(<1%)	+(<1%)	-	-	-	-	1(5%)	1(5%)	-	-	-	-	-	-	-	-

Transect	Transect 1 (T1) Northern hill from Beit Jala side – path 1								Transect 2 (T2) Beit Jala side –path 1				Transect 3 (T3) Lowland Valley between series of hills (northern, southern and eastern hills) from Beit Jala side – path 1			
	Q1		Q2		Q3		Q4		Q1		Q2		Q1		Q2	
Soil type	Rendzina soil with accumulation of Humus		Rendzina soil with accumulation of Humus		Rendzina soil with accumulation of Humus		Rendzina soil with accumulation of Humus		Alluvial soil, lots of humus and remaining of compost		Alluvial soil		Rendzina soil		Rendzina soil	
Habitat	maquis oak forest (startup of succession) with bath and Garrigue association		maquis forest (startup of succession) with bath and Garrigue association		maquis forest (startup of succession) with bath and Garrigue association		maquis forest (startup of succession) with bath and Garrigue association		Maquis oak forest, fallow land, and olive groves		Olive groves and fallow land, lots of humus		Bath and garrigue association, fallow land, and olive groves		Bath and garrigue association, fallow land, and olives groves	
Plant cover	Baseline: 65% plant cover End line: 65% plant cover		Baseline: 60% plant cover End line: 60%		Baseline: 60% plant cover End line: 60%		Baseline: 65% plant cover End line: 65%		Baseline: 70% plant cover End line: 70%		Baseline: 75% plant cover End line: 75%		Baseline: 80% plant cover End line: 80%		Baseline: 80% plant cover End line: 80% plant cover	
Elevations above sea level	793m		789m		790m		776m		781		771		736m		740m	
Slope	moderate steep		moderate steep		moderate steep		moderate steep		Steep		steep		flat		flat	
Species	Braun and Blanquet scale															
	Base	End	Base	End	Base	End	Base	End	Base	End	Base	End	Base	End	Base	End
<i>Teucrium divaricatum</i>	1(5%)	1(5%)	2(10%)	2(10%)	+($<1\%$)	+($<1\%$)	-	-	2(5%)	2(5%)	-	-	+($<1\%$)	+($<1\%$)	-	-
<i>Umbilicus intermedius</i>	-	-	-	-	-	-	-	-	-	-	+($<1\%$)	+($<1\%$)	-	-	-	-

Transect	Transect 4 (T4) – continuous series of Northern hill – path 1						Transect 5 (T5)- continuous series of Northern hill towards Battir – path 1				Transect 6 (T6) – valley of olive groves and fallow land – the valley below the northern hills of T5 – path 1			
	Q1		Q2		Q3		Q1		Q2		Q1		Q2	
Soil type	Brown and light rendzina		Brown and light rendzina		Brown and light rendzina		Brown and light rendzina		Brown and light rendzina		Brown rendzina		Brown rendzina	
Habitat	maquis forest –startup succession since 25years		maquis forest – startup succession since 25years		maquis forest–startup succession since 25years		maquis forest–startup succession since 25years		maquis forest–startup succession since 25years		Fallow land and olive groves– lots of segetal species		The trench of the valley	
Plant cover	Baseline: 80% plant cover End line: 85%		Baseline: 80% plant cover End line: 85%		Baseline: 80% plant cover End line: 85%		Baseline: 80% plant cover End line: 85%		Baseline: 80% plant cover End line: 85%		Baseline: 40% plant cover End line:		Baseline: 80% plant cover End line: 87%	
Elevations above sea level	753m		760m		748m		733m		737m		712 m		710	
Slope	Moderate steep		Moderate steep		Moderate steep		Very Steep		Very steep		flat		flat	
Species	Braun and Blanquet scale													
	Base	End	Base	End	Base	End	Base	End	Base	End	Base	End	Base	End
<i>Allium orientale</i>	-	-	-	-	-	-	-	-	-	-	+($<1\%$)	+($<1\%$)	-	-
<i>Anacamptis papilionacea</i>	-	-	-	-	-	-	+($<1\%$)	+($<1\%$)	-	-	-	-	-	-
<i>Andropogon distachyos</i>	+($<1\%$)	+($<1\%$)	-	-	-	-	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	-	-
<i>Anemone coronaria</i>	+($<1\%$)	+($<1\%$)	-	-	-	-	-	-	+($<1\%$)	+($<1\%$)	-	-	-	-
<i>Arbutus andrachne</i>	-	-	-	-	-	-	+($<1\%$)	1(5%)	+($<1\%$)	1(5%)	-	-	-	+(1%)
<i>Asparagus aphyllus</i>	+($<1\%$)	+($<1\%$)	1($<1\%$)	1($<1\%$)	+($<1\%$)	+($<1\%$)	-	-	+($<1\%$)	+($<1\%$)	-	-	+($<1\%$)	+($<1\%$)
<i>Asphodelus ramosus</i> <i>(microcarpus)</i>	+($<1\%$)	+($<1\%$)	-	-	-	-	+($<1\%$)	+($<1\%$)	-	-	-	-	-	-
<i>Bellis sylvestris</i>	-	-	-	-	-	-	-	-	-	-	+($<1\%$)	+($<1\%$)	-	-
<i>Calicotome villosa</i>	1(5%)	1(5%)	1(5%)	1(5%)	1(5%)	1(5%)	2(15%)	2(15%)	1(5%)	2(7%)	-	-	1(5%)	2(7%)

Transect	Transect 4 (T4) – continuous series of Northern hill – path 1						Transect 5 (T5)- continuous series of Northern hill towards Battir – path 1				Transect 6 (T6) – valley of olive groves and fallow land – the valley below the northern hills of T5 – path 1			
	Q1		Q2		Q3		Q1		Q2		Q1		Q2	
Soil type	Brown and light rendzina		Brown and light rendzina		Brown and light rendzina		Brown and light rendzina		Brown and light rendzina		Brown rendzina		Brown rendzina	
Habitat	maquis forest –startup succession since 25years		maquis forest – startup succession since 25years		maquis forest–startup succession since 25years		maquis forest–startup succession since 25years		maquis forest– startup succession since 25years		Fallow land and olive groves– lots of segetal species		The trench of the valley	
Plant cover	Baseline: 80% plant cover End line: 85%		Baseline: 80% plant cover End line: 85%		Baseline: 80% plant cover End line: 85%		Baseline: 80% plant cover End line: 85%		Baseline: 80% plant cover End line: 85%		Baseline: 40% plant cover End line:		Baseline: 80% plant cover End line: 87%	
Elevations above sea level	753m		760m		748m		733m		737m		712 m		710	
Slope	Moderate steep		Moderate steep		Moderate steep		Very Steep		Very steep		flat		flat	
Species	Braun and Blanquet scale													
	Base	End	Base	End	Base	End	Base	End	Base	End	Base	End	Base	End
<i>Carlina curetum</i>	-	-	-	-	+($<1\%$)	+($<1\%$)	-	-	-	-	-	-	-	-
<i>Ceratonia siliqua</i>	-	-	-	-	-	-	-	-	-	-	+($<1\%$)	+($<1\%$)	-	-
<i>Cistus salvifolius</i>	3(25%)	3(27%)	3(25%)	3(27%)	3(25%)	3(25%)	3(25%)	3(25%)	3(30%)	3(30%)	1(5%)	1(5%)	1(5%)	1(5%)
<i>Coridothymus capitatus</i>	3(25%)	3(25%)	3(25%)	3(25%)	3(30%)	3(30%)	3(25%)	3(25%)	3(30%)	3(30%)	-	-	1(5%)	1(5%)
<i>Cyclamen persicum</i>	1(5%)	1(5%)	2(10%)	2(10%)	1(5%)	1(5%)	+($<1\%$)	+($<1\%$)	-	-	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)
<i>Cupressus sempervirens</i>	-	-	-	-	-	-	-	-	+($<1\%$)	+($<1\%$)	-	-	-	-
<i>Erodium gruinum</i>	-	-	-	-	-	-	-	-	-	-	+($<1\%$)	+($<1\%$)	-	-
<i>Ephedra aphylla</i>	-	-	-	-	-	-	-	-	-	-	+($<1\%$)	+($<1\%$)		
<i>Eryngium cretium</i>	-	-	-	-	+($<1\%$)	+($<1\%$)	-	-	-	-				

Transect	Transect 4 (T4) – continuous series of Northern hill – path 1						Transect 5 (T5)- continuous series of Northern hill towards Battir – path 1				Transect 6 (T6) – valley of olive groves and fallow land – the valley below the northern hills of T5 – path 1			
	Q1		Q2		Q3		Q1		Q2		Q1		Q2	
Soil type	Brown and light rendzina		Brown and light rendzina		Brown and light rendzina		Brown and light rendzina		Brown and light rendzina		Brown rendzina		Brown rendzina	
Habitat	maquis forest –startup succession since 25years		maquis forest – startup succession since 25years		maquis forest–startup succession since 25years		maquis forest–startup succession since 25years		maquis forest– startup succession since 25years		Fallow land and olive groves– lots of segetal species		The trench of the valley	
Plant cover	Baseline: 80% plant cover End line: 85%		Baseline: 80% plant cover End line: 85%		Baseline: 80% plant cover End line: 85%		Baseline: 80% plant cover End line: 85%		Baseline: 80% plant cover End line: 85%		Baseline: 40% plant cover End line:		Baseline: 80% plant cover End line: 87%	
Elevations above sea level	753m		760m		748m		733m		737m		712 m		710	
Slope	Moderate steep		Moderate steep		Moderate steep		Very Steep		Very steep		flat		flat	
Species	Braun and Blanquet scale													
	Base	End	Base	End	Base	End	Base	End	Base	End	Base	End	Base	End
<i>Fumana arabica</i>	1(5%))	1(5%))	2(7%))	2(7%))	1(5%)	1(5%)	1(5%)	1(5%)	+(<1%)	+(<1%)	-	-	-	-
<i>Helichrysum sanguineum</i>	+(1%)	+(1%)	-	-	-	-	-	-	-	-				
<i>Hordeum bulbosum</i>	-	-	-	-	-	-	-	-	-	-	-	-	+(1%)	+(1%)
<i>Muscari neglectum (pulchellum)</i>	-	-	-	-	-	-	-	-	-	-	+(1%)	+(1%)	-	-
<i>Olea europaea</i>	-	-	+(1%)	+(1%)	-	-	-	-	-	-	5(80%)	5(80%)	-	-
<i>Paronychia argentea</i>	+(1%)	+(1%)	-	-	+(1%)	+(1%)	-	-	+(1%)	+(1%)	-	-	-	-
<i>Phagnalon rupestre</i>	+(1%)	+(1%)	1(5%))	1(5%)	+(1%)	+(1%)	-	-	+(1%)	+(1%)	-	-	+(1%)	+(1%)

Transect	Transect 4 (T4) – continuous series of Northern hill – path 1						Transect 5 (T5)- continuous series of Northern hill towards Battir – path 1				Transect 6 (T6) – valley of olive groves and fallow land – the valley below the northern hills of T5 – path 1			
	Q1		Q2		Q3		Q1		Q2		Q1		Q2	
Soil type	Brown and light rendzina		Brown and light rendzina		Brown and light rendzina		Brown and light rendzina		Brown and light rendzina		Brown rendzina		Brown rendzina	
Habitat	maquis forest –startup succession since 25years		maquis forest – startup succession since 25years		maquis forest–startup succession since 25years		maquis forest–startup succession since 25years		maquis forest– startup succession since 25years		Fallow land and olive groves– lots of segetal species		The trench of the valley	
Plant cover	Baseline: 80% plant cover End line: 85%		Baseline: 80% plant cover End line: 85%		Baseline: 80% plant cover End line: 85%		Baseline: 80% plant cover End line: 85%		Baseline: 80% plant cover End line: 85%		Baseline: 40% plant cover End line:		Baseline: 80% plant cover End line: 87%	
Elevations above sea level	753m		760m		748m		733m		737m		712 m		710	
Slope	Moderate steep		Moderate steep		Moderate steep		Very Steep		Very steep		flat		flat	
Species	Braun and Blanquet scale													
	Base	End	Base	End	Base	End	Base	End	Base	End	Base	End	Base	End
<i>Phalaris aquatica (tuberosa)</i>	-	-	-	-	-	-	-	-	-	-	-	-	+(<1%)	+(<1%)
<i>Phlomis viscosa</i>	-	-	-	-	-	-	-	-	-	-	-	-	+(<1%)	1(5%)
<i>Pinus halepensis</i>	+(<1%)	1(5%)	+(<1%)	1(5%)	+(<1%)	1(5%)	+(<1%)	1(5%)	+(<1%)	1(5%)	-	-	1(5%)	1(5%)
<i>Pinus pinea</i>	-	-	-	-	-	-	-	-	+(<1%)	+(<1%)	-	-	-	-
<i>Pistacia lentiscus</i>	+(<1%)	+(<1%)	-	-	+(<1%)	+(<1%)	-	-	-	-	-	-	-	-
<i>Pistacia palaestina</i>	-	-	-	-	+(<1%)	+(<1%)	+(<1%)	+(<1%)	-	-	-	-	+(<1%)	1(5%)
<i>Podonosma orientalis</i>	-	-	-	-	+(<1%)	+(<1%)	+(<1%)	+(<1%)	-	-	-	-	-	-
<i>Quercus calliprinos</i>	2(10%)	2(10%)	1(5%)	1(5%)	2(10%)	2(10%)	1(5%)	1(5%)	1(5%)	1(5%)	-	-	1(5%)	1(5%)

Transect	Transect 4 (T4) – continuous series of Northern hill – path 1						Transect 5 (T5)- continuous series of Northern hill towards Battir – path 1				Transect 6 (T6) – valley of olive groves and fallow land – the valley below the northern hills of T5 – path 1			
	Q1		Q2		Q3		Q1		Q2		Q1		Q2	
Soil type	Brown and light rendzina		Brown and light rendzina		Brown and light rendzina		Brown and light rendzina		Brown and light rendzina		Brown rendzina		Brown rendzina	
Habitat	maquis forest –startup succession since 25years		maquis forest – startup succession since 25years		maquis forest–startup succession since 25years		maquis forest–startup succession since 25years		maquis forest– startup succession since 25years		Fallow land and olive groves– lots of segetal species		The trench of the valley	
Plant cover	Baseline: 80% plant cover End line: 85%		Baseline: 80% plant cover End line: 85%		Baseline: 80% plant cover End line: 85%		Baseline: 80% plant cover End line: 85%		Baseline: 80% plant cover End line: 85%		Baseline: 40% plant cover End line:		Baseline: 80% plant cover End line: 87%	
Elevations above sea level	753m		760m		748m		733m		737m		712 m		710	
Slope	Moderate steep		Moderate steep		Moderate steep		Very Steep		Very steep		flat		flat	
Species	Braun and Blanquet scale													
	Base	End	Base	End	Base	End	Base	End	Base	End	Base	End	Base	End
<i>Rhamnus lycioides</i>	-	-	-	-	-	-	-	-	-	-	+(<1%)	+(<1%)	+(<1%)	+(<1%)
<i>Rubia tenuifolia</i>	-	-	-	-	+(<1%)	+(<1%)	-	-	-	-	+(<1%)	+(<1%)	+(<1%)	+(<1%)
<i>Sarcopoterium spinosum</i>	-	-	-	-	+(<1%)	+(<1%)	-	-	-	-	+(<1%)	+(<1%)	1(5%)	2(10%)
<i>Salvia dominica</i>	-	-	-	-	-	-	-	-	-	-	-	-	+(<1%)	+(<1%)
<i>Salvia indica</i>	-	-	-	-	-	-	-	-	-	-	-	-	+(<1%)	+(<1%)
<i>Smilax aspera</i>	-	-	-	-	-	-	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)
<i>Thrinicia tuberosa</i> <i>(Leontodon tuberosus)</i>	+(<1%)	+(<1%)	-	-	-	-	-	-	-	-	-	-	-	-

Transect	Transect 4 (T4) – continuous series of Northern hill – path 1						Transect 5 (T5)- continuous series of Northern hill towards Battir – path 1				Transect 6 (T6) – valley of olive groves and fallow land – the valley below the northern hills of T5 – path 1			
	Q1		Q2		Q3		Q1		Q2		Q1		Q2	
Soil type	Brown and light rendzina		Brown and light rendzina		Brown and light rendzina		Brown and light rendzina		Brown and light rendzina		Brown rendzina		Brown rendzina	
Habitat	maquis forest –startup succession since 25years		maquis forest – startup succession since 25years		maquis forest–startup succession since 25years		maquis forest–startup succession since 25years		maquis forest– startup succession since 25years		Fallow land and olive groves– lots of segetal species		The trench of the valley	
Plant cover	Baseline: 80% plant cover End line: 85%		Baseline: 80% plant cover End line: 85%		Baseline: 80% plant cover End line: 85%		Baseline: 80% plant cover End line: 85%		Baseline: 80% plant cover End line: 85%		Baseline: 40% plant cover End line:		Baseline: 80% plant cover End line: 87%	
Elevations above sea level	753m		760m		748m		733m		737m		712 m		710	
Slope	Moderate steep		Moderate steep		Moderate steep		Very Steep		Very steep		flat		flat	
Species	Braun and Blanquet scale													
	Base	End	Base	End	Base	End	Base	End	Base	End	Base	End	Base	End
<i>Teucrium capitatum (polium)</i>	+(1%)	+(1%)	1(5%)	1(5%)	+(1%)	+(1%)	-	-	-	-	-	-	-	-
<i>Teucrium creticum</i>	-	-	-	-	+(1%)	+(1%)	+(1%)	+(1%)	-	-	+(1%)	+(1%)	+(1%)	+(1%)
<i>Teucrium divaricatum</i>	1(5%)	1(5%)	1(5%)	1(5%)	2(7%)	2(7%)	3(20%)	3(20%)	1(5%)	1(5%)	-	-	-	-
<i>Thymbra spicata</i>	1(5%)	1(5%)	+(1%)	+(1%)	-	-	-	-	-	-	-	-	-	-

Transect	Transect7 (T7) – Southern hill in front of the northern hill of T5 –path 1				Transect 8 (T8) – Olive groves and fallow land towards Battir after T6 – path 1				Transect 9 (T9) – Southern Hill below AL Makhrouur restaurant from Beit Jala side –path 2			
	Q1		Q2		Q1		Q2		Q1		Q2	
Soil type	Mixed soil (Dark brown Rendzina & Terra Rossa) with lots of humus (10-25 cm) –deep soil		Mixed soil (Dark brown Rendzina & Terra Rossa) with lots of humus (10-25cm) – deep soil		Rendzina soil		Rendzina soil		Dark Rendzina		Dark Rendzina	
Habitat	Maquis oak forest (mature plant cover succession. The land was cultivated before 50-80 years)		Maquis oak forest (mature plant cover succession)		Olive groves and fallow land		Olive groves and fallow land		Mixed habitat of oak forest, bath association and olive groves		Mixed habitat of oak forest and olive groves	
Plant cover	Baseline: 90% plants End line: 95%		Baseline: 90% plants End line: 95%		Baseline: 60% plants End line: 60%		Baseline: 60% plants End line: 60%		Baseline: 70% plants End line: 75%		Baseline: 70% plants End line: 75%	
Elevations above sea level	709m		718m		712m		708m		769m		770m	
Slope	Very steep		Very steep		Flat		Flat		Steep to shallow slope		Steep to shallow slope	
Species												
	Base	End	Base	End	Base	End	Base	End	Base	End	Base	End
<i>Allium orientale</i>	-	-	-	-	+(1%)	+(1%)	-	-	-	-	-	-
<i>Andropogon distachyos</i>	-	-	+(1%)	+(1%)	+(1%)	+(1%)	+(1%)	+(1%)	+(1%)	+(1%)	1(5%)	1(5%)
<i>Arbutus andrachne</i>	2(7%)	2(10%)	2(7%)	2(10%)	-	-	-	-	-	-	-	-
<i>Anemone coronaria</i>	+(1%)	+(1%)	+(1%)	+(1%)	-	-	-	-	+(1%)	+(1%)	-	-
<i>Andrachne telephioides</i>	-	-	-	-	-	-	+(1%)	+(1%)	-	-	-	-
<i>Arisarum vulgare</i>	-	-	-	-	-	-	-	-	+(1%)	+(1%)	2(5%)	2(5%)

Transect	Transect7 (T7) – Southern hill in front of the northern hill of T5 –path 1				Transect 8 (T8) – Olive groves and fallow land towards Battir after T6 – path 1				Transect 9 (T9) – Southern Hill below AL Makhrouur restaurant from Beit Jala side –path 2			
	Q1		Q2		Q1		Q2		Q1		Q2	
Soil type	Mixed soil (Dark brown Rendzina & Terra Rossa) with lots of humus (10-25 cm) –deep soil		Mixed soil (Dark brown Rendzina & Terra Rossa) with lots of humus (10-25cm) – deep soil		Rendzina soil		Rendzina soil		Dark Rendzina		Dark Rendzina	
Habitat	Maquis oak forest (mature plant cover succession. The land was cultivated before 50-80 years)		Maquis oak forest (mature plant cover succession)		Olive groves and fallow land		Olive groves and fallow land		Mixed habitat of oak forest, bath association and olive groves		Mixed habitat of oak forest and olive groves	
Plant cover	Baseline: 90% plants End line: 95%		Baseline: 90% plants End line: 95%		Baseline: 60% plants End line: 60%		Baseline: 60% plants End line: 60%		Baseline: 70% plants End line: 75%		Baseline: 70% plants End line: 75%	
Elevations above sea level	709m		718m		712m		708m		769m		770m	
Slope	Very steep		Very steep		Flat		Flat		Steep to shallow slope		Steep to shallow slope	
Species												
	Base	End	Base	End	Base	End	Base	End	Base	End	Base	End
<i>Asparagus aphyllus</i>	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	2(7%)	2(7%)
<i>Asphodelus ramosus (microcarpus)</i>	-	-	-	-	-	-	-	-	+(<1%)	+(<1%)	+(<1%)	+(<1%)
<i>Bellevalia flexuosa</i>	-	-	-	-	+(<1%)	+(<1%)	+(<1%)	+(<1%)	-	-	-	-
<i>Bellis sylvestris</i>	+(<1%)	+(<1%)	+(<1%)	+(<1%)	-	-	-	-	+(<1%)	+(<1%)	1(<5%)	1(<5%)
<i>Calicotome villosa</i>	+(<1%)	+(<1%)	+(<1%)	+(<1%)	-	-	+(<1%)	+(<1%)	2(10%)	2(10%)	2(5%)	2(10%)
<i>Carlina hispanica</i>	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	-	-	+(<1%)	+(<1%)

Transect	Transect7 (T7) – Southern hill in front of the northern hill of T5 –path 1				Transect 8 (T8) – Olive groves and fallow land towards Battir after T6 – path 1				Transect 9 (T9) – Southern Hill below AL Makhrouur restaurant from Beit Jala side –path 2			
	Q1		Q2		Q1		Q2		Q1		Q2	
Soil type	Mixed soil (Dark brown Rendzina & Terra Rossa) with lots of humus (10-25 cm) –deep soil		Mixed soil (Dark brown Rendzina & Terra Rossa) with lots of humus (10-25cm) – deep soil		Rendzina soil		Rendzina soil		Dark Rendzina		Dark Rendzina	
Habitat	Maquis oak forest (mature plant cover succession. The land was cultivated before 50-80 years)		Maquis oak forest (mature plant cover succession)		Olive groves and fallow land		Olive groves and fallow land		Mixed habitat of oak forest, bath association and olive groves		Mixed habitat of oak forest and olive groves	
Plant cover	Baseline: 90% plants End line: 95%		Baseline: 90% plants End line: 95%		Baseline: 60% plants End line: 60%		Baseline: 60% plants End line: 60%		Baseline: 70% plants End line: 75%		Baseline: 70% plants End line: 75%	
Elevations above sea level	709m		718m		712m		708m		769m		770m	
Slope	Very steep		Very steep		Flat		Flat		Steep to shallow slope		Steep to shallow slope	
Species												
	Base	End	Base	End	Base	End	Base	End	Base	End	Base	End
<i>Carlina curetum</i>	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	-	-	+(<1%)	+(<1%)
<i>Capparis spinose</i>	-	-	-	-	-	-	-	-	-	-	-	-
<i>Cistus salvifolius</i>	+(<1%)	+(<1%)	+(<1%)	+(<1%)	1(5%)	1(5%)	1(5%)	1(5%)	3(25%)	3(25%)	2(7%)	2(10%)
<i>Coridothymus capitatus</i>	-	-	-	-	-	-	+(<1%)	+(<1%)	+(<1%)	+(<1%)	-	-
<i>Crataegus aronia</i>	+(<1%)	+(<1%)	+(<1%)	+(<1%)	-	-	-	-	-	-	-	-
<i>Cyclamen persicum</i>	+(<1%)	+(<1%)	+(<1%)	+(<1%)	-	-	-	-	2(20%)	2(20%)	2(15%)	2(15%)
<i>Dittrichia viscosa</i>	-	-	-	-	-	-	-	-	+(<1%)	+(<1%)	+(<1%)	+(<1%)

Transect	Transect7 (T7) – Southern hill in front of the northern hill of T5 –path 1				Transect 8 (T8) – Olive groves and fallow land towards Battir after T6 – path 1				Transect 9 (T9) – Southern Hill below AL Makhrouur restaurant from Beit Jala side –path 2			
	Q1		Q2		Q1		Q2		Q1		Q2	
Soil type	Mixed soil (Dark brown Rendzina & Terra Rossa) with lots of humus (10-25 cm) –deep soil		Mixed soil (Dark brown Rendzina & Terra Rossa) with lots of humus (10-25cm) – deep soil		Rendzina soil		Rendzina soil		Dark Rendzina		Dark Rendzina	
Habitat	Maquis oak forest (mature plant cover succession. The land was cultivated before 50-80 years)		Maquis oak forest (mature plant cover succession)		Olive groves and fallow land		Olive groves and fallow land		Mixed habitat of oak forest, bath association and olive groves		Mixed habitat of oak forest and olive groves	
Plant cover	Baseline: 90% plants End line: 95%		Baseline: 90% plants End line: 95%		Baseline: 60% plants End line: 60%		Baseline: 60% plants End line: 60%		Baseline: 70% plants End line: 75%		Baseline: 70% plants End line: 75%	
Elevations above sea level	709m		718m		712m		708m		769m		770m	
Slope	Very steep		Very steep		Flat		Flat		Steep to shallow slope		Steep to shallow slope	
Species												
	Base	End	Base	End	Base	End	Base	End	Base	End	Base	End
<i>Ephedra aphylla</i>	-	-	+($<1\%$)	+($<1\%$)	-	-	-	-	-	-	-	-
<i>Helichrysum sanguineum</i>	-	-	-	-	-	-	-	-	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)
<i>Fumana arabica</i>	+($<1\%$)	+($<1\%$)	-	-	-	-	-	-	3(20%)	3(20%)	1($<5\%$)	1($<5\%$)
<i>Fumana thymifolia</i>	-	-	-	-	-	-	-	-	1(5%)	1(5%)	-	-
<i>Olea europaea</i>	-	-	-	-	4(75%)	4(75%)	4(75%)	4(75%)	1(5%)	1(5%)	1($<5\%$)	1($<5\%$)
<i>Osyris alba</i>	-	-	-	-	-	-	-	-	+($<1\%$)	+($<1\%$)	-	-

Transect	Transect7 (T7) – Southern hill in front of the northern hill of T5 –path 1				Transect 8 (T8) – Olive groves and fallow land towards Battir after T6 – path 1				Transect 9 (T9) – Southern Hill below AL Makhrouur restaurant from Beit Jala side –path 2			
	Q1		Q2		Q1		Q2		Q1		Q2	
Soil type	Mixed soil (Dark brown Rendzina & Terra Rossa) with lots of humus (10-25 cm) –deep soil		Mixed soil (Dark brown Rendzina & Terra Rossa) with lots of humus (10-25cm) – deep soil		Rendzina soil		Rendzina soil		Dark Rendzina		Dark Rendzina	
Habitat	Maquis oak forest (mature plant cover succession. The land was cultivated before 50-80 years)		Maquis oak forest (mature plant cover succession)		Olive groves and fallow land		Olive groves and fallow land		Mixed habitat of oak forest, bath association and olive groves		Mixed habitat of oak forest and olive groves	
Plant cover	Baseline: 90% plants End line: 95%		Baseline: 90% plants End line: 95%		Baseline: 60% plants End line: 60%		Baseline: 60% plants End line: 60%		Baseline: 70% plants End line: 75%		Baseline: 70% plants End line: 75%	
Elevations above sea level	709m		718m		712m		708m		769m		770m	
Slope	Very steep		Very steep		Flat		Flat		Steep to shallow slope		Steep to shallow slope	
Species												
	Base	End	Base	End	Base	End	Base	End	Base	End	Base	End
<i>Oxalis pes-caprae</i>	-	-	-	-	+(1%)	+(1%)	-	-	-	-	-	-
<i>Pbagnalon rupestre</i>	-	-	-	-	-	-	-	-	+(1%)	+(1%))	-	-
<i>Phlomis viscosa</i>	+(1%)	1(5%)	+(1%)	+(1%)	-	-	-	-	-	-	-	-
<i>Pinus halepensis</i>	1(<5%)	1(<5%)	1(5%)	2(7%)	-	-	-	-	+(1%)	+(1%))	-	-
<i>Pistacia lentiscus</i>	+(1%)	+(1%)	+(1%)	+(1%)	-	-	-	-	+(1%)	+(1%))	-	-
<i>Pistacia palaestina</i>	1(5%)	1(5%)	1(5%)	1(5%)	+(1%)	+(1%)	+(1%))	+(1%))	+(1%)	+(1%))	2(7%)	2(7%)

Transect	Transect7 (T7) – Southern hill in front of the northern hill of T5 –path 1				Transect 8 (T8) – Olive groves and fallow land towards Battir after T6 – path 1				Transect 9 (T9) – Southern Hill below AL Makhrouur restaurant from Beit Jala side –path 2			
	Q1		Q2		Q1		Q2		Q1		Q2	
Soil type	Mixed soil (Dark brown Rendzina & Terra Rossa) with lots of humus (10-25 cm) –deep soil		Mixed soil (Dark brown Rendzina & Terra Rossa) with lots of humus (10-25cm) – deep soil		Rendzina soil		Rendzina soil		Dark Rendzina		Dark Rendzina	
Habitat	Maquis oak forest (mature plant cover succession. The land was cultivated before 50-80 years)		Maquis oak forest (mature plant cover succession)		Olive groves and fallow land		Olive groves and fallow land		Mixed habitat of oak forest, bath association and olive groves		Mixed habitat of oak forest and olive groves	
Plant cover	Baseline: 90% plants End line: 95%		Baseline: 90% plants End line: 95%		Baseline: 60% plants End line: 60%		Baseline: 60% plants End line: 60%		Baseline: 70% plants End line: 75%		Baseline: 70% plants End line: 75%	
Elevations above sea level	709m		718m		712m		708m		769m		770m	
Slope	Very steep		Very steep		Flat		Flat		Steep to shallow slope		Steep to shallow slope	
Species												
	Base	End	Base	End	Base	End	Base	End	Base	End	Base	End
<i>Poa bulbosa</i>	-	-	-	-	-	-	+($<1\%$)	+($<1\%$)	-	-	-	-
<i>Quercus calliprinos</i>	5(75%)	5(75%)	5(75%)	5(80%)	+($<1\%$)	+($<1\%$)	1($<5\%$)	1($<5\%$)	2(5%)	2(5%)	2(7%)	2(7%)
<i>Ranunculus asiaticus</i>	-	-	-	-	-	-	-	-	+($<1\%$)	+($<1\%$)	-	-
<i>Rhamnus lycioides</i>	1($<5\%$)	1($<5\%$)	+($<1\%$)	1($<5\%$)	-	-	-	-	+($<1\%$)	+($<1\%$)	+($<1\%$)	1($<5\%$)
<i>Rubia tenuifolia</i>	-	-	+($<1\%$)	+($<1\%$)	-	-	-	-	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)
<i>Sarcopoterium spinosum</i>	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	1($<5\%$)	1($<5\%$)	1(5%)	1(5%)	1(5%)	1(5%)

Transect	Transect7 (T7) – Southern hill in front of the northern hill of T5 –path 1				Transect 8 (T8) – Olive groves and fallow land towards Battir after T6 – path 1				Transect 9 (T9) – Southern Hill below AL Makhrouur restaurant from Beit Jala side –path 2			
	Q1		Q2		Q1		Q2		Q1		Q2	
Soil type	Mixed soil (Dark brown Rendzina & Terra Rossa) with lots of humus (10-25 cm) –deep soil		Mixed soil (Dark brown Rendzina & Terra Rossa) with lots of humus (10-25cm) – deep soil		Rendzina soil		Rendzina soil		Dark Rendzina		Dark Rendzina	
Habitat	Maquis oak forest (mature plant cover succession. The land was cultivated before 50-80 years)		Maquis oak forest (mature plant cover succession)		Olive groves and fallow land		Olive groves and fallow land		Mixed habitat of oak forest, bath association and olive groves		Mixed habitat of oak forest and olive groves	
Plant cover	Baseline: 90% plants End line: 95%		Baseline: 90% plants End line: 95%		Baseline: 60% plants End line: 60%		Baseline: 60% plants End line: 60%		Baseline: 70% plants End line: 75%		Baseline: 70% plants End line: 75%	
Elevations above sea level	709m		718m		712m		708m		769m		770m	
Slope	Very steep		Very steep		Flat		Flat		Steep to shallow slope		Steep to shallow slope	
Species												
	Base	End	Base	End	Base	End	Base	End	Base	End	Base	End
<i>Smilax aspera</i>	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	-	-	-	-	+($<1\%$)	+($<1\%$))	+($<1\%$)	+($<1\%$))
<i>Styrax officinalis</i>	-	-	-	-	-	-	-	-	+($<1\%$)	+($<1\%$))	-	-
<i>Taraxacum cyprium</i>	-	-	-	-	-	-	-	-	+($<1\%$)	+($<1\%$))	-	-
<i>Teucrium capitatum (polium)</i>	-	-	-	-	-	-	-	-	+($<1\%$)	1($<5\%$)	1($<5\%$)	1($<5\%$))
<i>Teucrium creticum</i>	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	-	-	-	-	+($<1\%$)	+($<1\%$))	-	-
<i>Teucrium divaricatum</i>	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	-	-	-	-	1($<5\%$)	1($<5\%$)	-	-

Transect	Transect7 (T7) – Southern hill in front of the northern hill of T5 –path 1				Transect 8 (T8) – Olive groves and fallow land towards Battir after T6 – path 1				Transect 9 (T9) – Southern Hill below AL Makhrouur restaurant from Beit Jala side –path 2			
	Q1		Q2		Q1		Q2		Q1		Q2	
Soil type	Mixed soil (Dark brown Rendzina & Terra Rossa) with lots of humus (10-25 cm) –deep soil		Mixed soil (Dark brown Rendzina & Terra Rossa) with lots of humus (10-25cm) – deep soil		Rendzina soil		Rendzina soil		Dark Rendzina		Dark Rendzina	
Habitat	Maquis oak forest (mature plant cover succession. The land was cultivated before 50-80 years)		Maquis oak forest (mature plant cover succession)		Olive groves and fallow land		Olive groves and fallow land		Mixed habitat of oak forest, bath association and olive groves		Mixed habitat of oak forest and olive groves	
Plant cover	Baseline: 90% plants End line: 95%		Baseline: 90% plants End line: 95%		Baseline: 60% plants End line: 60%		Baseline: 60% plants End line: 60%		Baseline: 70% plants End line: 75%		Baseline: 70% plants End line: 75%	
Elevations above sea level	709m		718m		712m		708m		769m		770m	
Slope	Very steep		Very steep		Flat		Flat		Steep to shallow slope		Steep to shallow slope	
Species												
	Base	End	Base	End	Base	End	Base	End	Base	End	Base	End
<i>Thrincia tuberosa</i>	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	-	-	-	-	+($<1\%$)	+($<1\%$)	1($<5\%$)	1($<5\%$)
<i>Thymbra spicata</i>	-	-	+($<1\%$)	+($<1\%$)	-	-	-	-	+($<1\%$)	+($<1\%$)	1($<5\%$)	1($<5\%$)
<i>Tolpis virgate</i>	-	-	-	-	-	-	-	-	+($<1\%$)	+($<1\%$)	-	-
<i>Umbilicus intermedius</i>	-	-	-	-	-	-	-	-	1($<5\%$)	1($<5\%$)	1($<5\%$)	1($<5\%$)

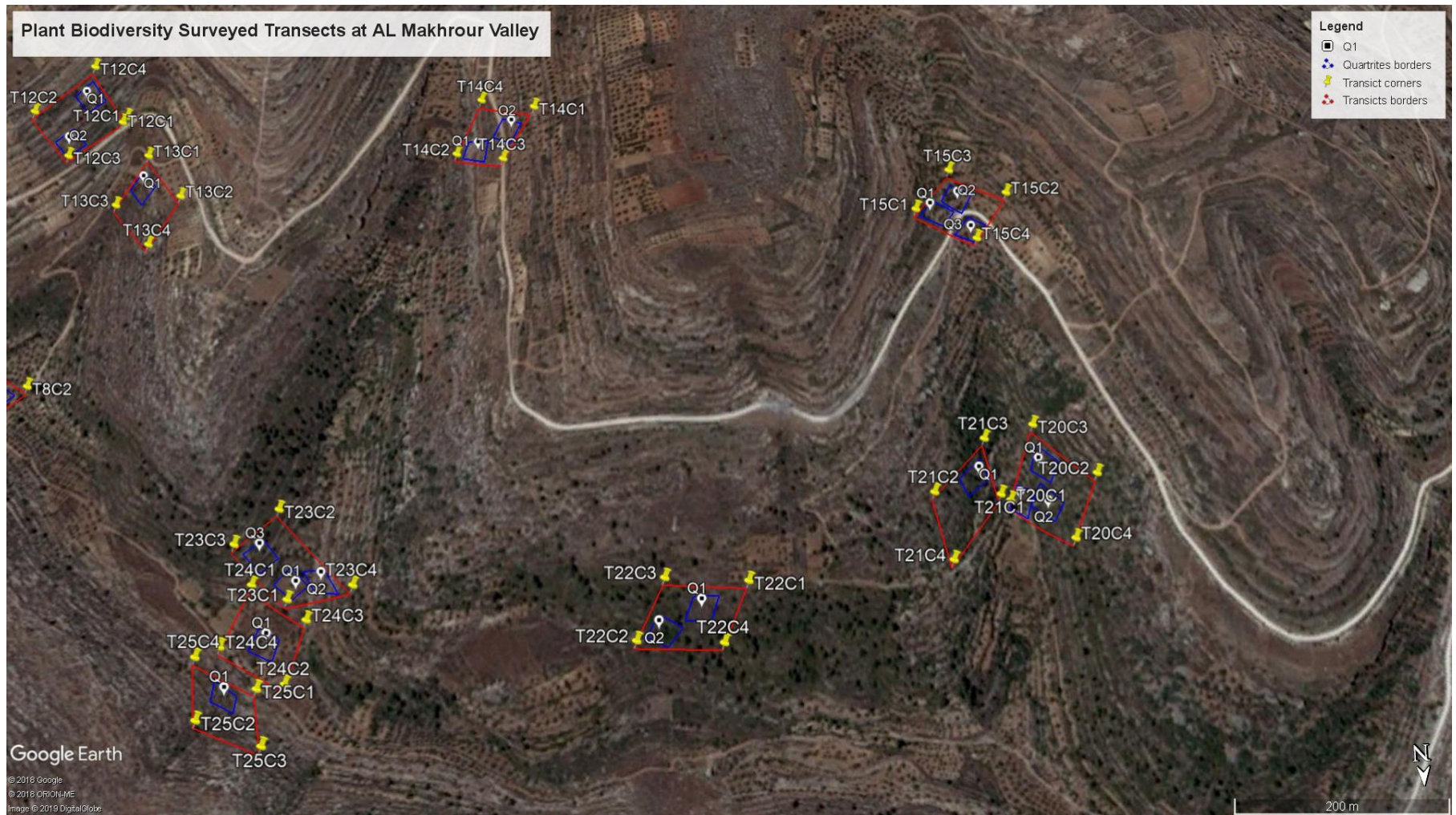
Transect	Transect 10 (T10) – slope of southern hill below the path after T9 – path 2				Transect 11 (T11) – At Abu Saliba house and stairs- below the path after T10 – path 2	
	Q1		Q2		Q1	
Soil type	Dark Rendzina		Dark Rendzina		Dark Rendzina	
Habitat	Mixed habitat of natural oak forest and Pine coniferous man- made forest		Mixed habitat of oak forest and olive groves		Natural Oak forest	
Plant cover	Baseline: 80% plants End line: 80%		Baseline: 70% plants End line: 75%		Baseline: 85% plants End line: 87%	
Elevations above sea level	764m		769m		759m	
Slope	Very steep		Steep		Very steep	
Species	Braun and Blanquet scale					
	Base	End	Base	End	Base	End
<i>Anchusa hybrid</i>	-	-	-	-	2(5%)	2(5%)
<i>Alkanna strigosa</i>	-	-	-	-	+(<1%)	+(<1%)
<i>Anemone coronaria</i>	-	-	+(<1%)	+(<1%)	+(<1%)	+(<1%)
<i>Andropogon distachyos</i>	+(<1%)	+(<1%)	1(<5%)	1(<5%)	1(<5%)	2(<10%)
<i>Arisarum vulgare</i>	-	-	2(5%)	2(5%)	-	-
<i>Asparagus aphyllus</i>	+(<1%)	+(<1%)	2(5%)	2(5%)	+(<1%)	+(<1%)
<i>Asphodelus ramosus (microcarpus)</i>	-	-	+(<1%)	+(<1%)	-	-
<i>Bellis sylvestris</i>	+(<1%)	+(<1%)	+(<5%)	+(<5%)	+(<1%)	+(<1%)
<i>Calicotome villosa</i>	1(<5%)	1(<5%)	2(5%)	2(10%)	1(<5%)	1(<5%)
<i>Carlina hispanica</i>	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)
<i>Carlina curetum</i>	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)
<i>Capparis spinose</i>	-	-	-	-	+(<1%)	+(<1%)
<i>Ceratonia siliqua</i>	-	-	-	-	+(<1%)	+(<1%)
<i>Cistus creticum (incans)</i>	1(<5%)	1(<5%)	2(7%)	2(7%)	1(5%)	2(7%)

Transect	Transect 10 (T10) – slope of southern hill below the path after T9 – path 2				Transect 11 (T11) – At Abu Saliba house and stairs- below the path after T10 – path 2	
	Q1		Q2		Q1	
Soil type	Dark Rendzina		Dark Rendzina		Dark Rendzina	
Habitat	Mixed habitat of natural oak forest and Pine coniferous man- made forest		Mixed habitat of oak forest and olive groves		Natural Oak forest	
Plant cover	Baseline: 80% plants End line: 80%		Baseline: 70% plants End line: 75%		Baseline: 85% plants End line: 87%	
Elevations above sea level	764m		769m		759m	
Slope	Very steep		Steep		Very steep	
Species	Braun and Blanquet scale					
	Base	End	Base	End	Base	End
<i>Cistus salvifolius</i>	1(<5%)	1(<5%)	1(<5%)	1(<5%)	+($<1\%$)	1(5%)
<i>Coridothymus capitatus</i>	+($<1\%$)	+($<1\%$)	-	-	1(<5%)	1(<5%)
<i>Crataegus aronia</i>	+($<1\%$)	+($<1\%$)	-	-	-	-
<i>Cupressus sempervirens</i>	-	-	-	-	+($<1\%$)	+($<1\%$)
<i>Cyclamen persicum</i>	+($<1\%$)	+($<1\%$)	2(15%)	2(15%)	1(<5%)	1(<5%)
<i>Dittrichia viscosa</i>	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	2(5%)	2(5%)
<i>Ephedra aphylla</i>	+($<1\%$)	+($<1\%$)	-	-	+($<1\%$)	+($<1\%$)
<i>Foeniculum vulgare</i>	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	-	+($<1\%$)
<i>Fumana arabica</i>	+($<1\%$)	+($<1\%$)	1(5%)	1(5%)	+($<1\%$)	+($<1\%$)
<i>Fumana thymifolia</i>	+($<1\%$)	+($<1\%$)	-	-	+($<1\%$)	+($<1\%$)
<i>Helichrysum sanguineum</i>	+($<1\%$)	+($<1\%$)	-	-	+($<1\%$)	+($<1\%$)
<i>Nasturtium officinale</i>	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	-	-

Transect	Transect 10 (T10) – slope of southern hill below the path after T9 – path 2				Transect 11 (T11) – At Abu Saliba house and stairs- below the path after T10 – path 2	
	Q1		Q2		Q1	
Soil type	Dark Rendzina		Dark Rendzina		Dark Rendzina	
Habitat	Mixed habitat of natural oak forest and Pine coniferous man- made forest		Mixed habitat of oak forest and olive groves		Natural Oak forest	
Plant cover	Baseline: 80% plants End line: 80%		Baseline: 70% plants End line: 75%		Baseline: 85% plants End line: 87%	
Elevations above sea level	764m		769m		759m	
Slope	Very steep		Steep		Very steep	
Species	Braun and Blanquet scale					
	Base	End	Base	End	Base	End
<i>Olea europaea</i>	1(<5%)	1(<5%)	2(5%)	2(5%)	+(<1%)	+(<1%)
<i>Oxalis pes-caprae</i>	-	-	-	-	+(<1%)	+(<1%)
<i>Phagnalon rupestre</i>	-	-	-	-	+(<1%)	+(<1%)
<i>Phlomis viscosa</i>	-	-	-	+(<1%)	+(<1%)	+(<1%)
<i>Pinus halepensis</i>	1(<5%)	1(<5%)	-	+(<1%)	1(<5%)	1(<5%)
<i>Pinus Pinea</i>	-	-	-	-	+(<1%)	+(<1%)
<i>Pistacia palaestina</i>	+(<1%)	+(<1%)	2(7%)	2(7%)	1(5%)	1(5%)
<i>Poa bulbosa</i>	-	-	-	-	+(<1%)	+(<1%)
<i>Quercus calliprinos</i>	2 (25%)	2 (25%)	2(25%)	2(25%)	2(5%)	2(10%)
<i>Ranunculus asiaticus</i>	-	-	+(<1%)	+(<1%)	-	-
<i>Rhamnus lycioides</i>	1(<5%)	1(<5%)	1(<5%)	1(<5%)	-	-
<i>Rhus coriaria</i>	+(<1%)	+(<1%)	-	-	-	-

Transect	Transect 10 (T10) – slope of southern hill below the path after T9 – path 2				Transect 11 (T11) – At Abu Saliba house and stairs- below the path after T10 – path 2	
	Q1		Q2		Q1	
Soil type	Dark Rendzina		Dark Rendzina		Dark Rendzina	
Habitat	Mixed habitat of natural oak forest and Pine coniferous man- made forest		Mixed habitat of oak forest and olive groves		Natural Oak forest	
Plant cover	Baseline: 80% plants End line: 80%		Baseline: 70% plants End line: 75%		Baseline: 85% plants End line: 87%	
Elevations above sea level	764m		769m		759m	
Slope	Very steep		Steep		Very steep	
Species	Braun and Blanquet scale					
	Base	End	Base	End	Base	End
<i>Rubia tenuifolia</i>	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)
<i>Sarcopoterium spinosum</i>	-		+($<1\%$)	1(5%)	-	1($<5\%$)
<i>Scorzonera papposa</i>	-	-	-	-	+($<1\%$)	+($<1\%$)
<i>Smilax aspera</i>	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)
<i>Styrax officinalis</i>	+($<1\%$)	+($<1\%$)	-	-	-	-
<i>Taraxacum cyprium</i>	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	-	-
<i>Teucrium divaricatum</i>	-	+($<1\%$)	-	-	+($<1\%$)	+($<1\%$)
<i>Teucrium capitatum (polium)</i>	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	-	-
<i>Teucrium creticum</i>	+($<1\%$)	+($<1\%$)	-	-	+($<1\%$)	+($<1\%$)
<i>Thrinicia tuberosa</i>	-	+($<1\%$)	1($<5\%$)	1($<5\%$)	+($<1\%$)	+($<1\%$)
<i>Thymbra spicata</i>	-	-	1($<5\%$)	1($<5\%$)	+($<1\%$)	+($<1\%$)
<i>Tolpis virgate</i>	-	-	+($<1\%$)	+($<1\%$)	-	-
<i>Trifolium argutum</i>	-	-	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)
<i>Umbilicus intermedius</i>	-	-	1($<5\%$)	1($<5\%$)	+($<1\%$)	+($<1\%$)

Transect	Transect 10 (T10) – slope of southern hill below the path after T9 – path 2		Transect 11 (T11) – At Abu Saliba house and stairs- below the path after T10 – path 2			
	Q1	Q2	Q1			
Soil type	Dark Rendzina	Dark Rendzina	Dark Rendzina			
Habitat	Mixed habitat of natural oak forest and Pine coniferous man- made forest	Mixed habitat of oak forest and olive groves	Natural Oak forest			
Plant cover	Baseline: 80% plants End line: 80%	Baseline: 70% plants End line: 75%	Baseline: 85% plants End line: 87%			
Elevations above sea level	764m	769m	759m			
Slope	Very steep	Steep	Very steep			
Species	Braun and Blanquet scale					
	Base	End	Base	End	Base	End
<i>Verbascum sinuatum</i>	-	-	-	-	+($<1\%$)	+($<1\%$)



Map 3.2: Presents the distribution and geo-location of the studied transects T12, T13, T14, T15, T20, T22, T23, T24 and T25 and their quadrats at MKV- (Middle of the Valley).

Transect	Transect 12 (T12) – South East hill in middle of the Valley – path 2				Transect 13 (T13) – Slope below the path - opposite T12 – path 2		Transect 14 (T14) – North West Hill- above the owl nest - Middle of the Valley – section below path and section above path - path 2			
	Q1		Q2		Q1		Q1		Q2	
Soil type	White light and Dark Rendzina		White light and Dark Rendzina		White light Rendzina		Light Rendzina		Brown Rendzina	
Habitat	Batha Association (in succession) with scattered Pine forest		Batha Association (in succession) with scattered Pine forest		Mixture of Olive groves, fallow land, and batha association		Batha association with a section of heap association		Olive groves and batha association	
Plant cover	Baseline: 70% plants End line: 70%		Baseline: 60% plants End line: 60%		Baseline: 80% plants End line: 80%		Baseline: 70% plants End line: 70%		Baseline: 70% plants End line: 70%	
Elevations above sea level	802m		805m		775m		792m		789m	
Slope	Shallow slope		Shallow slope		Fore-slope (under path)		Shallow Slope (under path)		Steep (above path)	
Species	Braun and Blanquet scale									
	Base	End	Base	End	Base	End	Base	End	Base	End
<i>Anemone coronaria</i>	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	-	-	+($<1\%$)	+($<1\%$)
<i>Andropogon distachyos</i>	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	-	-	+($<1\%$)	+($<1\%$)
<i>Asparagus aphyllus</i>	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)
<i>Bellis sylvestris</i>	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)
<i>Biarum angustatum</i>	+($<1\%$)	+($<1\%$)	-	-	-	-	-	-	-	-
<i>Calicotome villosa</i>	1($<5\%$)	1($<5\%$)	1($<5\%$)	1($<5\%$)	2(5%)	2(5%)	1(5%)	1(5%)	1($<5\%$)	1($<5\%$)
<i>Carlina hispanica</i>	-	-	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)
<i>Carlina curetum</i>	-	-	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	-	-	-	-
<i>Cistus creticus</i>	2(12%)	2(12%)	2(12%)	2(12%)	2(5%)	2(5%)	-	-	1(5%)	1(5%)
<i>Cistus salvifolius</i>	2(12%)	2(12%)	2(12%)	2(12%)	2(5%)	2(5%)				
<i>Coridothymus capitatus</i>	1($<5\%$)	1($<5\%$)	2($<5\%$)	2($<5\%$)	-	-	-	-	1($<5\%$)	1($<5\%$)

Transect	Transect 12 (T12) – South East hill in middle of the Valley – path 2				Transect 13 (T13) – Slope below the path - opposite T12 – path 2		Transect 14 (T14) – North West Hill- above the owl nest - Middle of the Valley – section below path and section above path - path 2			
	Q1		Q2		Q1		Q1		Q2	
Soil type	White light and Dark Rendzina		White light and Dark Rendzina		White light Rendzina		Light Rendzina		Brown Rendzina	
Habitat	Batha Association (in succession) with scattered Pine forest		Batha Association (in succession) with scattered Pine forest		Mixture of Olive groves, fallow land, and batha association		Batha association with a section of heap association		Olive groves and batha association	
Plant cover	Baseline: 70% plants End line: 70%		Baseline: 60% plants End line: 60%		Baseline: 80% plants End line: 80%		Baseline: 70% plants End line: 70%		Baseline: 70% plants End line: 70%	
Elevations above sea level	802m		805m		775m		792m		789m	
Slope	Shallow slope		Shallow slope		Fore-slope (under path)		Shallow Slope (under path)		Steep (above path)	
Species	Braun and Blanquet scale									
	Base	End	Base	End	Base	End	Base	End	Base	End
<i>Cyclamen persicum</i>	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	1($<5\%$)	1($<5\%$)	+($<1\%$)	+($<1\%$)	-	-
<i>Dittrichia viscosa</i>	-	-	-	-	+($<1\%$)	+($<1\%$)	-	-	-	-
<i>Eminium spiculatum</i>	-	-	-	-	+($<1\%$)	+($<1\%$)	-	-	-	-
<i>Ephedra aphylla</i>	-	-	-	-	-	-	+($<1\%$)	+($<1\%$)	-	-
<i>Foeniculum vulgare</i>	-	+($<1\%$)	-	-	-	-	-	-	-	-
<i>Fumana arabica</i>	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)
<i>Fumana thymifolia</i>	+($<1\%$)	+($<1\%$)	-	-	-	-	+($<1\%$)	+($<1\%$)	-	-
<i>Gagea commutate</i>	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	-	-	-	-	-	-
<i>Helichrysum sanguineum</i>	+($<1\%$)	+($<1\%$)	-	-	+($<1\%$)	+($<1\%$)	1($<5\%$)	1($<5\%$)	+($<1\%$)	+($<1\%$)
<i>Lactuca tuberosa</i>	-	-	-	-	+($<1\%$)	+($<1\%$)	($<1\%$)	($<1\%$)	-	-
<i>Mentha longifolia</i>	-	-	-	-	-	-	+($<1\%$)	+($<1\%$)		
<i>Micromeria nervosa</i>	+($<1\%$)	+($<1\%$)	-	-	-	-	-	-	-	-
<i>Olea europaea</i>	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	2(15%)	2(15%)	-	-	3(25%)	3(25%)
<i>Phagnalon rupestre</i>	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)

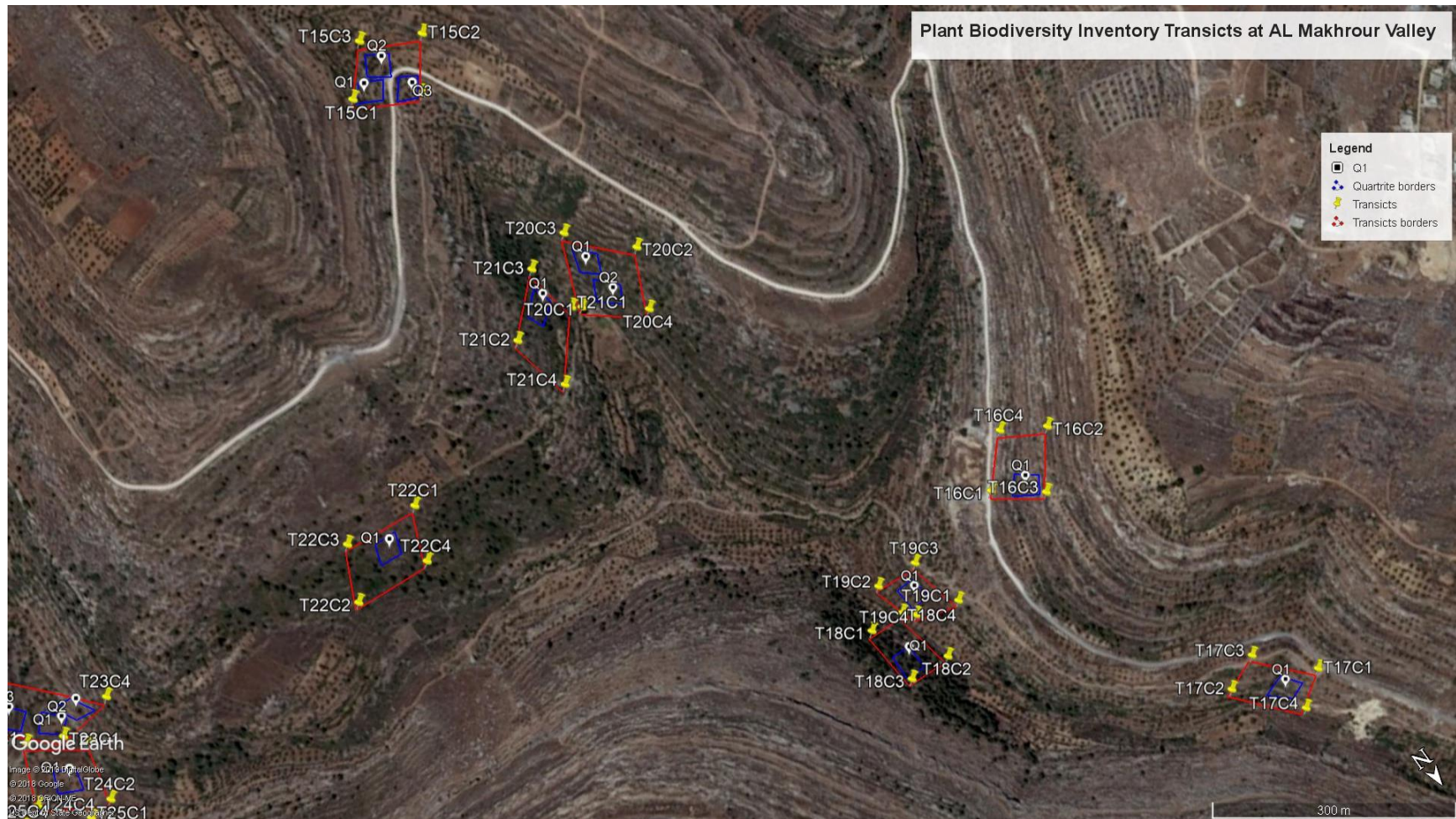
Transect	Transect 12 (T12) – South East hill in middle of the Valley – path 2				Transect 13 (T13) – Slope below the path - opposite T12 – path 2		Transect 14 (T14) – North West Hill- above the owl nest - Middle of the Valley – section below path and section above path - path 2			
	Q1		Q2		Q1		Q1		Q2	
Soil type	White light and Dark Rendzina		White light and Dark Rendzina		White light Rendzina		Light Rendzina		Brown Rendzina	
Habitat	Batha Association (in succession) with scattered Pine forest		Batha Association (in succession) with scattered Pine forest		Mixture of Olive groves, fallow land, and batha association		Batha association with a section of heap association		Olive groves and batha association	
Plant cover	Baseline: 70% plants End line: 70%		Baseline: 60% plants End line: 60%		Baseline: 80% plants End line: 80%		Baseline: 70% plants End line: 70%		Baseline: 70% plants End line: 70%	
Elevations above sea level	802m		805m		775m		792m		789m	
Slope	Shallow slope		Shallow slope		Fore-slope (under path)		Shallow Slope (under path)		Steep (above path)	
Species	Braun and Blanquet scale									
	Base	End	Base	End	Base	End	Base	End	Base	End
<i>Phlomis viscosa</i>	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	-	-	-	-	-	-
<i>Pinus halepensis</i>	2(10%)	2(10%)	2(10%)	2(10%)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	1($<5\%$)	1($<5\%$)
<i>Pistacia palaestina</i>	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	-	-	-	-
<i>Poa bulbosa</i>	1($<5\%$)	1($<5\%$)	-	-	-	-	-	-	-	-
<i>Quercus calliprinos</i>	1($<5\%$)	1($<5\%$)	+($<1\%$)	+($<1\%$)	2($<5\%$)	2($<5\%$)	1(5%)	1(5%)	1($<5\%$)	1($<5\%$)
<i>Ranunculus asiaticus</i>	+($<1\%$)	+($<1\%$)	-	-	-	-	-	-	-	-
<i>Rubia tenuifolia</i>	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	-	-	-	-	+($<1\%$)	+($<1\%$)
<i>Sarcopoterium spinosum</i>	2(15%)	2(15%)	2(20%)	2(20%)	3(30%)	3(30%)	3(40%)	3(40%)	2(25%)	2(25%)
<i>Salvia dominica</i>	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	-	-	-	-	-	-
<i>Salvia Palaestina</i>	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	-	-	-	-	-	-
<i>Smilax aspera</i>	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	-	-	-	-	-	-
<i>Styrax officinalis</i>	-	-	-	-	+($<1\%$)	+($<1\%$)	-	-	-	-
<i>Thrinicia tuberosa</i>	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	1($<5\%$)	1($<5\%$)	+($<1\%$)	+($<1\%$)
<i>Thymbra spicata</i>	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	-	-

Transect	Transect 12 (T12) – South East hill in middle of the Valley – path 2				Transect 13 (T13) – Slope below the path - opposite T12 – path 2		Transect 14 (T14) – North West Hill- above the owl nest - Middle of the Valley – section below path and section above path - path 2			
	Q1		Q2		Q1		Q1		Q2	
Soil type	White light and Dark Rendzina		White light and Dark Rendzina		White light Rendzina		Light Rendzina		Brown Rendzina	
Habitat	Batha Association (in succession) with scattered Pine forest		Batha Association (in succession) with scattered Pine forest		Mixture of Olive groves, fallow land, and batha association		Batha association with a section of heap association		Olive groves and batha association	
Plant cover	Baseline: 70% plants End line: 70%		Baseline: 60% plants End line: 60%		Baseline: 80% plants End line: 80%		Baseline: 70% plants End line: 70%		Baseline: 70% plants End line: 70%	
Elevations above sea level	802m		805m		775m		792m		789m	
Slope	Shallow slope		Shallow slope		Fore-slope (under path)		Shallow Slope (under path)		Steep (above path)	
Species	Braun and Blanquet scale									
	Base	End	Base	End	Base	End	Base	End	Base	End
<i>Teucrium capitatum (polium)</i>	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	-	-	-	-	-	-
<i>Teucrium creticum</i>	-	-	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	-	-	-	-
<i>Teucrium divaricatum</i>	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	-	-	-	-	-	-
<i>Umbilicus intermedius</i>	-	-	+($<1\%$)	+($<1\%$)	-	-	+($<1\%$)	+($<1\%$)	-	-

Transect	Transect 15 (T15) – Mountain south east- Curved area – above path 2 and Q3 below path 2 opposite Q1 and Q2 towards E'in A'mdan from southern side						Transect 16 (T16) –above path 2- eastern mountain	
	Q1		Q2		Q3		Q1	
Soil type	Dark Rendzina		Dark Rendzina		Dark and light Rendzina		Light Rendzina	
Habitat	Mixed Oak maquis forest and olive groves		Mixed Oak maquis forest and olive groves		Olive Groves and fallow land		Batha association	
Plant cover	Baseline: 80% plants End line: 80%		Baseline: 83% plants End line: 83%		Baseline: 75% plants End line: 75%		Baseline: 52% plants End line: 55%	
Elevations above sea level	791m		792m		650m		680m	
Slope	Steep slope		Flat part on mid of the hill		Shallow slope – below the path		Very Steep	
Species	Braun and Blanquet scale							
	Base	End	Base	End	Base	End	Base	End
<i>Allium neapolitanum</i>	-	-	+(<1%)	+(<1%)	-	-	-	-
<i>Andropogon distachyos</i>	-	-	-	-	+(<1%)	+(<1%)	2(5%)	2(10%)
<i>Arbutus andrachne</i>	+(<1%)	+(<1%)	1(<5%)	1(<5%)	-	-	-	-
<i>Asparagus aphyllus</i>	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	-	-
<i>Asphodelus ramosus (microcarpus)</i>	-	-	-	-	+(<1%)	+(<1%)	+(<1%)	1(5%)
<i>Calicotome villosa</i>	2(5%)	2(5%)	2(5%)	2(5%)	+(<1%)	+(<1%)	-	-
<i>Carlina hispanica or Carlina curetum</i>	-	-	+(<1%)	+(<1%)	-	-	+(<1%)	+(<1%)
<i>Cistus creticus (incans)</i>	1(5%)	1(5%)	1(<5%)	1(<5%)	1(<5%)	1(<5%)	1(5%)	1(5%)
<i>Cistus salvifolius</i>	1(5%)	1(5%)	1(<5%)	1(<5%)	1(<5%)	1(<5%)	+(<1%)	1(<5%)
<i>Coridothymus capitatus</i>	1(<5%)	1(<5%)	+(<1%)	+(<1%)	-	-	2(10%)	2(10%)
<i>Cyclamen persicum</i>	+(<1%)	+(<1%)	1(<5%)	1(<5%)	-	-	-	-
<i>Dittrichia viscosa</i>	-	-	-	-	+(<1%)	+(<1%)	+(<1%)	+(<1%)
<i>Ephedra aphylla</i>	+(<1%)	+(<1%)	+(<1%)	+(<1%)	-	-	-	-
<i>Fumana thymifolia</i>	+(<1%)	+(<1%)	+(<1%)	+(<1%)	-	-	+(<1%)	+(<1%)
<i>Fumana arabica</i>	+(<1%)	+(<1%)	+(<1%)	+(<1%)	-	-	+(<1%)	+(<1%)
<i>Lactuca tuberosa</i>	+(<1%)	+(<1%)	+(<1%)	+(<1%)	-	-	-	-

Transect	Transect 15 (T15) – Mountain south east- Curved area – above path 2 and Q3 below path 2 opposite Q1 and Q2 towards E'in A'mdan from southern side						Transect 16 (T16) –above path 2- eastern mountain	
	Q1		Q2		Q3		Q1	
Soil type	Dark Rendzina		Dark Rendzina		Dark and light Rendzina		Light Rendzina	
Habitat	Mixed Oak maquis forest and olive groves		Mixed Oak maquis forest and olive groves		Olive Groves and fallow land		Batha association	
Plant cover	Baseline: 80% plants End line: 80%		Baseline: 83% plants End line: 83%		Baseline: 75% plants End line: 75%		Baseline: 52% plants End line: 55%	
Elevations above sea level	791m		792m		650m		680m	
Slope	Steep slope		Flat part on mid of the hill		Shallow slope – below the path		Very Steep	
Species	Braun and Blanquet scale							
	Base	End	Base	End	Base	End	Base	End
<i>Mentha longifolia</i>	1(<5%)	1(<5%)	1(<5%)	1(<5%)	-	-	-	-
<i>Olea europaea</i>	2(10%)	2(10%)	2(15%)	2(15%)	4(55%)	4(55%)	-	-
<i>Phagnalon rupestre</i>	-	-	+(<1%)	+(<1%)	+(<1%)	+(<1%)	-	-
<i>Pinus halepensis</i>	1(<5%)	1(<5%)	+(<1%)	+(<1%)	-	-	1(5%)	1(5%)
<i>Pistacia lentiscus</i>	1(5%)	1(5%)	1(5%)	1(5%)	-	-	-	-
<i>Pistacia palaestina</i>	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)
<i>Quercus calliprinos</i>	3(25%)	3(25%)	3(35%)	3(35%)	1(<5%)	1(<5%)	1(5%)	1(5%)
<i>Ranunculus asiaticus</i>	-	-	-	-	-	-	+(<1%)	+(<1%)
<i>Rubia tenuifolia</i>	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	-	-
<i>Sarcopoterium spinosum</i>	1(<5%)	1(<5%)	1(<5%)	1(<5%)	2(5%)	2(5%)	2(10%)	2(10%)
<i>Smilax aspera</i>	+(<1%)	+(<1%)	1(<5%)	1(<5%)	+(<1%)	+(<1%)	-	-
<i>Styrax officinalis</i>	+(<1%)	+(<1%)	-	-	-	-	-	-
<i>Teucrium capitatum (polium)</i>	-	-	-	-	-	-	1(<5%)	1(<5%)
<i>Teucrium creticum</i>	-	-	-	-	+(<1%)	+(<1%)	+(<1%)	+(<1%)
<i>Teucrium divaricatum</i>	+(<1%)	+(<1%)	+(<1%)	+(<1%)	-	-	-	-
<i>Thymbra spicata</i>	1(5%)	1(5%)	1(<5%)	1(<5%)	-	-	+(<1%)	+(<1%)

Transect	Transect 15 (T15) – Mountain south east- Curved area – above path 2 and Q3 below path 2 opposite Q1 and Q2 towards E'in A'mdan from southern side						Transect 16 (T16) –above path 2- eastern mountain	
	Q1		Q2		Q3		Q1	
Soil type	Dark Rendzina		Dark Rendzina		Dark and light Rendzina		Light Rendzina	
Habitat	Mixed Oak maquis forest and olive groves		Mixed Oak maquis forest and olive groves		Olive Groves and fallow land		Batha association	
Plant cover	Baseline: 80% plants End line: 80%		Baseline: 83% plants End line: 83%		Baseline: 75% plants End line: 75%		Baseline: 52% plants End line: 55%	
Elevations above sea level	791m		792m		650m		680m	
Slope	Steep slope		Flat part on mid of the hill		Shallow slope – below the path		Very Steep	
Species	Braun and Blanquet scale							
	Base	End	Base	End	Base	End	Base	End
<i>Umbilicus intermedius</i>	+(<1%)	+(<1%)	+(<1%)	+(<1%)	-	-	-	-





Maps 3.2 and 3.3: Presents the distribution and geo-location of the studied transects T15, T16, T17, T18, T19, T20, T21, T22, T23, T24 and T25 and their quadrats at MKV- (Middle of the Valley).

Transect	Transect 17 (T17) Slope below path 1, exactly under the main stairs that takes to path 1 from Battir side		Transect 18 (T18) – Northern mountain opposite T19 from Battir Side – below path 1 – near the valley		Transect 19 (T19) – southern mountain opposite T18 from Battir side – below path 1	
	Q1		Q1		Q1	
Soil type	Light Rendzina soil		Rendzina soil		Light Rendzina soil	
Habitat	Mixed Olive groves/fallow land, oak forest and terraces supporting batha association		Coniferous man-made forest (Pine trees of an aged between 22-25 years old)		Olive groves and fallow land supported with terraces	
Plant cover	Baseline: 70% plants End line: 70%		Baseline: 75% plants End line: 75%		Baseline: 68% plants End line: 68%	
Elevations above sea level	640 m		652m		650m	
Slope	Very steep		Steep		Steep	
Species	Braun and Blanquet scale					
	Base	End	Base	End	Base	End
<i>Amygdalus communis</i>	-	-	-	-	+($<1\%$)	+($<1\%$)
<i>Andropogon distachyos</i>	+($<1\%$)	+($<1\%$)	-	-	-	-
<i>Anemone coronaria</i>	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)
<i>Arisarum vulgare</i>	-	-	-	-	+($<1\%$)	+($<1\%$)
<i>Asphodelus ramosus</i> (<i>microcarpus</i>)	-	-	-	-	+($<1\%$)	+($<1\%$)
<i>Ballota saxatilis</i>	-	-	-	-	+($<1\%$)	+($<1\%$)
<i>Carlina hispanica</i>	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)
<i>Carlina curetum</i>	+($<1\%$)	+($<1\%$)	-	-	+($<1\%$)	+($<1\%$)
<i>Chiliadenus iphionoides</i>	+($<1\%$)	+($<1\%$)	-	-	-	-
<i>Cistus salvifolius</i>	1(5%)	1(5%)	2(7%)	2(7%)	-	-

Transect	Transect 17 (T17) Slope below path 1, exactly under the main stairs that takes to path 1 from Battir side		Transect 18 (T18) – Northern mountain opposite T19 from Battir Side – below path 1 – near the valley		Transect 19 (T19) – southern mountain opposite T18 from Battir side – below path 1	
	Q1		Q1		Q1	
Soil type	Light Rendzina soil		Rendzina soil		Light Rendzina soil	
Habitat	Mixed Olive groves/fallow land, oak forest and terraces supporting batha association		Coniferous man-made forest (Pine trees of an aged between 22-25 years old)		Olive groves and fallow land supported with terraces	
Plant cover	Baseline: 70% plants End line: 70%		Baseline: 75% plants End line: 75%		Baseline: 68% plants End line: 68%	
Elevations above sea level	640 m		652m		650m	
Slope	Very steep		Steep		Steep	
Species	Braun and Blanquet scale					
	Base	End	Base	End	Base	End
<i>Cistus creticus</i>	-	-	1(<5%)	1(<5%)	-	-
<i>Coridothymus capitatus</i>	1(<5%)	1(<5%)	1(5%)	1(5%)	-	-
<i>Crataegus aronia</i>	+(<1%)	+(<1%)	+(<1%)	+(<1%)	-	-
<i>Cyclamen persicum</i>	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)
<i>Euphorbia hierosolymitana</i>	+(<1%)	+(<1%)	-	-	-	-
<i>Gagea commutata</i>	+(<1%)	+(<1%)	-	-	+(<1%)	+(<1%)
<i>Helichrysum sanguineum</i>	+(<1%)	+(<1%)	-	-	+(<1%)	+(<1%)
<i>Moraea sisyrinchium</i>	+(<1%)	+(<1%)	-	-	-	-
<i>Olea europaea</i>	3(25%)	3(25%)	-	1(5%)	3(45%)	3(45%)
<i>Phagnalon rupestre</i>	+(<1%)	+(<1%)	-	-	+(<1%)	+(<1%)
<i>Pinus halepensis</i>	1(<5%)	1(<5%)	3(40%)	3(40%)	1(<5%)	1(<5%)

Transect	Transect 17 (T17) Slope below path 1, exactly under the main stairs that takes to path 1 from Battir side		Transect 18 (T18) – Northern mountain opposite T19 from Battir Side – below path 1 – near the valley		Transect 19 (T19) – southern mountain opposite T18 from Battir side – below path 1	
	Q1		Q1		Q1	
Soil type	Light Rendzina soil		Rendzina soil		Light Rendzina soil	
Habitat	Mixed Olive groves/fallow land, oak forest and terraces supporting batha association		Coniferous man-made forest (Pine trees of an aged between 22-25 years old)		Olive groves and fallow land supported with terraces	
Plant cover	Baseline: 70% plants End line: 70%		Baseline: 75% plants End line: 75%		Baseline: 68% plants End line: 68%	
Elevations above sea level	640 m		652m		650m	
Slope	Very steep		Steep		Steep	
Species	Braun and Blanquet scale					
	Base	End	Base	End	Base	End
<i>Pistacia Palaestina</i>	1(5%)	1(5%)	-	-	1(5%)	1(5%)
<i>Poa bulbosa</i>	+(<1%)	+(<1%)	-	-	-	-
<i>Podonosma orientalis</i>	+(<1%)	+(<1%)	-	-	-	-
<i>Quercus calliprinos</i>	3(30%)	3(30%)	1(5%)	1(5%)	1(5%)	1(5%)
<i>Ranunculus asiaticus</i>	+(<1%)	+(<1%)	-	-	-	-
<i>Rhamnus lycioides</i> (<i>Rhamnus palaestinus</i>)	+(<1%)	+(<1%)	-	-	-	-
<i>Rubia tenuifolia</i>	+(<1%)	+(<1%)	-	-	-	-
<i>Sarcopoterium spinosum</i>	1(5%)	1(5%)	2(10%)	2(10%)	1(<5%)	1(<5%)
<i>Teucrium capitatum</i>	-	-	-	-	+(<1%)	+(<1%)
<i>Thymbra spicata</i>	+(<1%)	+(<1%)	-	-	-	-

Transect	Transect 20 (T20) - south western mountain – above E'in A'mdan spring- a divergent path from path 1 towards E'in A'mdan						Transect 21 (T21) – north eastern mountain – above E'in A'mdan spring – a divergent path from path 1 towards E'in A'mdan		Transect 22 (T22) AL Koulia Stone is in the middle of the two quadrats of this transect- on path 1 –Middle of the valley			
	Q1	Q2	Q3	Q1	Q1	Q2	Q1	Q1	Q1	Q2	Q3	Q4
Soil type	Rendzina	Rendzina	Rendzina	Rendzina	Rendzina	Rendzina	Rendzina	Rendzina	Rendzina	Rendzina	Rendzina	Rendzina
Habitat	Mixed Oak and Pine forest supporting batha association – succession more than 25 years	Mixed Oak and Pine forest supporting batha association – succession more than 25 years	Batha association	Mixed Oak and Pine forest supporting batha association - Succession more than 25 years	Batha - Garrigue association	Olive groves and fallow land						
Plant cover	Baseline: 75% plants End line: 75%	Baseline: 77% plants End line: 80%	Baseline: 57% plants End line: 57%	Baseline: 69% plants End line: 75%	Baseline: 73% plants End line: 73%	Baseline: 65% plants End line: 65%						
Elevations above sea level	695m	693m	690m	701m	659m	657m						
Slope	Steep	Very steep	Flat	Steep	Steep	Flat						
Species	Braun and Blanquet scale											
	Base	End	Base	End	Base	End	Base	End	Base	End	Base	End
<i>Amygdalus communis</i>	+($<1\%$)	+($<1\%$))	1($<5\%$)	1($<5\%$)	-	-	+($<1\%$)	+($<1\%$)	-	-	+($<1\%$)	+($<1\%$))
<i>Andropogon distachyos</i>	-	-	-	-	-	-	+($<1\%$)	+($<1\%$)	1(5%)	1(5%)	+($<1\%$)	+($<1\%$))
<i>Anemone coronaria</i>	-	-	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	-	-	-	-	+($<1\%$)	+($<1\%$))
<i>Anchusa hybrida</i>	-	-	-	-	+($<1\%$)	+($<1\%$)	-	-	-	-	-	-

Transect	Transect 20 (T20) - south western mountain – above E'in A'mdan spring- a divergent path from path 1 towards E'in A'mdan						Transect 21 (T21) – north eastern mountain – above E'in A'mdan spring – a divergent path from path 1 towards E'in A'mdan		Transect 22 (T22) AL Koulia Stone is in the middle of the two quadrats of this transect- on path 1 –Middle of the valley			
	Q1		Q2		Q3		Q1		Q1		Q2	
Soil type	Rendzina		Rendzina		Rendzina		Rendzina		Rendzina		Rendzina	
Habitat	Mixed Oak and Pine forest supporting batha association – succession more than 25 years		Mixed Oak and Pine forest supporting batha association – succession more than 25 years		Batha association		Mixed Oak and Pine forest supporting batha association - Succession more than 25 years		Batha - Garrigue association		Olive groves and fallow land	
Plant cover	Baseline: 75% plants End line: 75%		Baseline: 77% plants End line: 80%		Baseline: 57% plants End line: 57%		Baseline: 69% plants End line: 75%		Baseline: 73% plants End line: 73%		Baseline: 65% plants End line: 65%	
Elevations above sea level	695m		693m		690m		701m		659m		657m	
Slope	Steep		Very steep		Flat		Steep		Steep		Flat	
Species	Braun and Blanquet scale											
	Base	End	Base	End	Base	End	Base	End	Base	End	Base	End
<i>Anemone coronaria</i>	-	-	-	-	-	-	-	-	+(<1%)	+(<1%)	+(<1%)	+(<1%)
<i>Alkanna strigosa</i>	-	-	-	-	-	-	-	-	-	-	+(<1%)	+(<1%)
<i>Anacamptis papilionacea</i> <i>(Orchis papilionacea)</i>	-	-	-	-	-	-	-	-	+(<1%)	+(<1%)	-	-
<i>Arbutus andrachne</i>	2(25%)	2(25%)	2(25%)	2(25%)	-	-	2(5%)	2(10%)	-	-	-	-
<i>Asparagus aphyllus</i>	-	-	-	-	-	-	-	-	+(<1%)	+(<1%)	1(<5%)	1(<5%)
<i>Calicotome villosa</i>	1(5%)	1(5%)	1(<5%)	1(<5%)	-	-	2(14%)	2(14%)	1(5%)	1(5%)	-	-
<i>Carlina hispanica</i>	-	-	-	-	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)

Transect	Transect 20 (T20) - south western mountain – above E'in A'mdan spring- a divergent path from path 1 towards E'in A'mdan						Transect 21 (T21) – north eastern mountain – above E'in A'mdan spring – a divergent path from path 1 towards E'in A'mdan		Transect 22 (T22) AL Koulia Stone is in the middle of the two quadrats of this transect- on path 1 –Middle of the valley			
	Q1		Q2		Q3		Q1		Q1		Q2	
Soil type	Rendzina		Rendzina		Rendzina		Rendzina		Rendzina		Rendzina	
Habitat	Mixed Oak and Pine forest supporting batha association – succession more than 25 years		Mixed Oak and Pine forest supporting batha association – succession more than 25 years		Batha association		Mixed Oak and Pine forest supporting batha association - Succession more than 25 years		Batha - Garrigue association		Olive groves and fallow land	
Plant cover	Baseline: 75% plants End line: 75%		Baseline: 77% plants End line: 80%		Baseline: 57% plants End line: 57%		Baseline: 69% plants End line: 75%		Baseline: 73% plants End line: 73%		Baseline: 65% plants End line: 65%	
Elevations above sea level	695m		693m		690m		701m		659m		657m	
Slope	Steep		Very steep		Flat		Steep		Steep		Flat	
Species	Braun and Blanquet scale											
	Base	End	Base	End	Base	End	Base	End	Base	End	Base	End
<i>Carlina curretum</i>	-	-	-	-	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)
<i>Cistus salvifolius</i>	1($<5\%$)	1($<5\%$))	1($<5\%$)	1($<5\%$)	-	-	2(7%)	2(7%)	2(10%)	2(10%)	1(5%)	1(5%)
<i>Cistus creticus (incanus)</i>	1($<5\%$)	1($<5\%$))	1($<5\%$)	1($<5\%$)	-	-	2(7%)	2(7%)	-	-	-	-
<i>Coridothymus capitatus</i>	1($<5\%$)	1($<5\%$))	2(10%)	2(10%)	-	-	2(7%)	2(7%)	2(7%)	2(7%)	1($<5\%$)	1($<5\%$)
<i>Cupressus sempervirens</i>	-	-	-	-	-	-	+($<1\%$)	+($<1\%$)	-	-	-	-
<i>Cyclamen persicum</i>	1($<5\%$)	1($<5\%$))	+($<1\%$)	+($<1\%$)	2(5%)	2(5%)	1($<5\%$)	1($<5\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)

Transect	Transect 20 (T20) - south western mountain – above E'in A'mdan spring- a divergent path from path 1 towards E'in A'mdan						Transect 21 (T21) – north eastern mountain – above E'in A'mdan spring – a divergent path from path 1 towards E'in A'mdan		Transect 22 (T22) AL Koulia Stone is in the middle of the two quadrats of this transect- on path 1 –Middle of the valley			
	Q1		Q2		Q3		Q1		Q1		Q2	
Soil type	Rendzina		Rendzina		Rendzina		Rendzina		Rendzina		Rendzina	
Habitat	Mixed Oak and Pine forest supporting batha association – succession more than 25 years		Mixed Oak and Pine forest supporting batha association – succession more than 25 years		Batha association		Mixed Oak and Pine forest supporting batha association - Succession more than 25 years		Batha - Garrigue association		Olive groves and fallow land	
Plant cover	Baseline: 75% plants End line: 75%		Baseline: 77% plants End line: 80%		Baseline: 57% plants End line: 57%		Baseline: 69% plants End line: 75%		Baseline: 73% plants End line: 73%		Baseline: 65% plants End line: 65%	
Elevations above sea level	695m		693m		690m		701m		659m		657m	
Slope	Steep		Very steep		Flat		Steep		Steep		Flat	
Species	Braun and Blanquet scale											
	Base	End	Base	End	Base	End	Base	End	Base	End	Base	End
<i>Dittrichia viscosa (Inula viscosa)</i>	-	-	-	-	-	-	+($<1\%$)	+($<1\%$)	-	-	+($<1\%$)	+($<1\%$)
<i>Eryngium creticum</i>	-	-	-	-	-	-	-	2(7%)	+($<1\%$)	+($<1\%$)	-	-
<i>Ficus carica</i>	-	-	-	-	-	-	-	2(7%)	-	-	+($<1\%$)	+($<1\%$)
<i>Fumana Arabica</i>	1(5%)	1(5%)	-	-	-	-	+($<1\%$)	+($<1\%$)	-	-	-	-
<i>Gagea commutate</i>	-	-	-	-	-	-	-	1($<5\%$)	-	-	+($<1\%$)	+($<1\%$)
<i>Hordeum bulbosum</i>	-	-	-	-	-	-	-	+($<1\%$)	2(7%)	2(7%)	+($<1\%$)	+($<1\%$)

Transect	Transect 20 (T20) - south western mountain – above E'in A'mdan spring- a divergent path from path 1 towards E'in A'mdan						Transect 21 (T21) – north eastern mountain – above E'in A'mdan spring – a divergent path from path 1 towards E'in A'mdan		Transect 22 (T22) AL Koulia Stone is in the middle of the two quadrats of this transect- on path 1 –Middle of the valley			
	Q1		Q2		Q3		Q1		Q1		Q2	
Soil type	Rendzina		Rendzina		Rendzina		Rendzina		Rendzina		Rendzina	
Habitat	Mixed Oak and Pine forest supporting batha association – succession more than 25 years		Mixed Oak and Pine forest supporting batha association – succession more than 25 years		Batha association		Mixed Oak and Pine forest supporting batha association - Succession more than 25 years		Batha - Garrigue association		Olive groves and fallow land	
Plant cover	Baseline: 75% plants End line: 75%		Baseline: 77% plants End line: 80%		Baseline: 57% plants End line: 57%		Baseline: 69% plants End line: 75%		Baseline: 73% plants End line: 73%		Baseline: 65% plants End line: 65%	
Elevations above sea level	695m		693m		690m		701m		659m		657m	
Slope	Steep		Very steep		Flat		Steep		Steep		Flat	
Species	Braun and Blanquet scale											
	Base	End	Base	End	Base	End	Base	End	Base	End	Base	End
<i>Helichrysum sanguineum</i>	-	-	-	-	-	-	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	-	-
<i>Moraea sisyrinchium</i>	-	-	-	-	-	-	-	-	1($<5\%$)	1($<5\%$)	+($<1\%$)	+($<1\%$)
<i>Malva parviflora</i>	-	-	-	-	-	-	-	-	-	-	+($<1\%$)	+($<1\%$)
<i>Micromeria nervosa</i>	-	-	-	-	-	-	-	+($<1\%$)	+($<1\%$)	+($<1\%$)	-	-
<i>Olea europaea</i>	1(5%)	1(5%)	2(5%)	2(5%)	-	-	1(5%)	1(5%)	1($<5\%$)	1($<5\%$)	3(37%)	3(37%)
<i>Onobrychis caput-galli</i>	-	-	-	-	+($<1\%$)	+($<1\%$)	-	-	-	-	-	-

Transect	Transect 20 (T20) - south western mountain – above E'in A'mdan spring- a divergent path from path 1 towards E'in A'mdan						Transect 21 (T21) – north eastern mountain – above E'in A'mdan spring – a divergent path from path 1 towards E'in A'mdan		Transect 22 (T22) AL Koulia Stone is in the middle of the two quadrats of this transect- on path 1 –Middle of the valley			
	Q1		Q2		Q3		Q1		Q1		Q2	
Soil type	Rendzina		Rendzina		Rendzina		Rendzina		Rendzina		Rendzina	
Habitat	Mixed Oak and Pine forest supporting batha association – succession more than 25 years		Mixed Oak and Pine forest supporting batha association – succession more than 25 years		Batha association		Mixed Oak and Pine forest supporting batha association - Succession more than 25 years		Batha - Garrigue association		Olive groves and fallow land	
Plant cover	Baseline: 75% plants End line: 75%		Baseline: 77% plants End line: 80%		Baseline: 57% plants End line: 57%		Baseline: 69% plants End line: 75%		Baseline: 73% plants End line: 73%		Baseline: 65% plants End line: 65%	
Elevations above sea level	695m		693m		690m		701m		659m		657m	
Slope	Steep		Very steep		Flat		Steep		Steep		Flat	
Species	Braun and Blanquet scale											
	Base	End	Base	End	Base	End	Base	End	Base	End	Base	End
<i>Phagnalon rupestre</i>	1(<5%)	1(<5%)	+(<1%)	+(<1%)	-	-	+(<1%)	+(<1%)	1(<5%)	1(<5%)	-	-
<i>Phlomis viscosa</i>	-	-	-	-	+(<1%)	+(<1%)	-	-	1(5%)	1(5%)	-	-
<i>Pinus halepensis</i>	2(10%)	2(7%)	-	1(<5%)	-	-	1(<5%)	2(<10%)	-	-	+(<1%)	+(<1%)
<i>Pistacia Palaestina</i>	2(15%)	2(15%)	2(5%)	2(5%)	1(<5%)	1(<5%)	1(<5%)	2(7%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)
<i>Poa bulbosa</i>	-	-	-	-	+(<1%)	+(<1%)	-	-	+(<1%)	+(<1%)	-	-
<i>Podonosma orientalis</i>	-	-	-	-	-	-	-	-	+(<1%)	+(<1%)	-	-
<i>Quercus calliprinos</i>	3(45%)	3(45%)	2(20%)	2(20%)	1(5%)	1(5%)	2(12%)	2(12%)	1(<5%)	1(<5%)	1(<5%)	1(<5%)

Transect	Transect 20 (T20) - south western mountain – above E'in A'mdan spring- a divergent path from path 1 towards E'in A'mdan						Transect 21 (T21) – north eastern mountain – above E'in A'mdan spring – a divergent path from path 1 towards E'in A'mdan		Transect 22 (T22) AL Koulia Stone is in the middle of the two quadrats of this transect- on path 1 –Middle of the valley			
	Q1	Q2	Q3	Q1	Q1	Q2	Q1	Q1	Q1	Q1	Q2	Q2
Soil type	Rendzina	Rendzina	Rendzina	Rendzina	Rendzina	Rendzina	Rendzina	Rendzina	Rendzina	Rendzina	Rendzina	Rendzina
Habitat	Mixed Oak and Pine forest supporting batha association – succession more than 25 years	Mixed Oak and Pine forest supporting batha association – succession more than 25 years	Batha association	Mixed Oak and Pine forest supporting batha association - Succession more than 25 years	Mixed Oak and Pine forest supporting batha association - Succession more than 25 years	Batha - Garrigue association	Olive groves and fallow land					
Plant cover	Baseline: 75% plants End line: 75%	Baseline: 77% plants End line: 80%	Baseline: 57% plants End line: 57%	Baseline: 69% plants End line: 75%	Baseline: 73% plants End line: 73%	Baseline: 65% plants End line: 65%						
Elevations above sea level	695m	693m	690m	701m	659m	657m						
Slope	Steep	Very steep	Flat	Steep	Steep	Flat						
Species	Braun and Blanquet scale											
	Base	End	Base	End	Base	End	Base	End	Base	End	Base	End
<i>Rhamnus lycioides</i> (<i>Rhamnus palaestinus</i>)	-	-	-	-	-	-	-	-	+(<1%)	+(<1%)	-	-
<i>Rubia tenuifolia</i>	1(<5%)	1(<5%))	-	-	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	-	-
<i>Sarcopoterium spinosum</i>	-	-	2(15%)	2(15%)	+(<1%)	+(<1%)	2(7%)	2(7%)	3(35%)	3(35%)	1(<5%)	1(<5%)
<i>Sedum sediforme</i>	-	-	-	-	-	-	-	+(<1%)	-	-	-	-
<i>Smilax aspera</i>	+(<1%)	+(<1%))	+(<1%)	+(<1%)	+(<1%)	+(<1%)	1(<5%)	1(<5%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)
<i>Spartium junceum</i>	-	-	-	-	+(<1%)	+(<1%)	-	-	-	-	-	-

Transect	Transect 20 (T20) - south western mountain – above E'in A'mdan spring- a divergent path from path 1 towards E'in A'mdan						Transect 21 (T21) – north eastern mountain – above E'in A'mdan spring – a divergent path from path 1 towards E'in A'mdan		Transect 22 (T22) AL Koulia Stone is in the middle of the two quadrats of this transect- on path 1 –Middle of the valley			
	Q1	Q2	Q3	Q1	Q1	Q2	Q1	Q1	Q1	Q2	Q3	Q4
Soil type	Rendzina	Rendzina	Rendzina	Rendzina	Rendzina	Rendzina	Rendzina	Rendzina	Rendzina	Rendzina	Rendzina	Rendzina
Habitat	Mixed Oak and Pine forest supporting batha association – succession more than 25 years	Mixed Oak and Pine forest supporting batha association – succession more than 25 years	Batha association	Mixed Oak and Pine forest supporting batha association - Succession more than 25 years	Batha - Garrigue association	Olive groves and fallow land						
Plant cover	Baseline: 75% plants End line: 75%	Baseline: 77% plants End line: 80%	Baseline: 57% plants End line: 57%	Baseline: 69% plants End line: 75%	Baseline: 73% plants End line: 73%	Baseline: 65% plants End line: 65%						
Elevations above sea level	695m	693m	690m	701m	659m	657m						
Slope	Steep	Very steep	Flat	Steep	Steep	Flat						
Species	Braun and Blanquet scale											
	Base	End	Base	End	Base	End	Base	End	Base	End	Base	End
<i>Teucrium capitatum</i>	+($<1\%$)	+($<1\%$))	-	-	-	-	-	-	+($<1\%$)	+($<1\%$)	-	-
<i>Teucrium divaricatum</i>	-	-	-	-	-	-	-	-	+($<1\%$)	+($<1\%$)	-	-
<i>Thrinia tuberosa</i>	-	-	-	-	-	-	-	-	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)
<i>Umbilicus intermedius</i>	-	-	-	-	1(5%)	1(5%)	-	-	+($<1\%$)	+($<1\%$)	-	-

Transect	Transect 23 (T23) – Middle of the valley at the sha’ab one – path 1						Transect 24 (T24) Middle of the valley at the sha’ab one – path 1		Transect 25 (T25)- Middle of the valley opposite sha’ab one – path 1	
	Q1		Q2		Q3		Q1		Q1	
Soil type	Brown Rendzina		Light Rendzina		Light Rendzina		Brown and light Rendzina		Light Rendzina	
Habitat	Mixed habitat of oak forest and olive groves and fallow land with wide terraces		Mixed Oak and Pine forest		Mixed Pine and Oak forest		Olive groves and fallow land		Mixed Oak and Pine forest supporting batha association with many terraces	
Plant cover	Baseline: 65% plants End line: 65%		Baseline: 67% plants End line: 67%		Baseline:70% plants End line:70%		Baseline: 62% plants End line: 62%		Baseline: 60% plants End line: 60%	
Elevations above sea level	689m		692m		693m		680m		675m	
Slope	Flat		Steep		Very Steep		Flat		Very Steep	
Species	Braun and Blanquet scale									
	Base	End	Base	End	Base	End	Base	End	Base	End
<i>Amygdalus communis</i>	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	-	-	-	-
<i>Anchusa undulata (hybrid)</i>	-	-	-	-	-	-	+($<1\%$)	+($<1\%$)	-	-
<i>Andropogon distachyos</i>	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)
<i>Anemone coronaria</i>	-	-	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)
<i>Asparagus aphyllus</i>	-	-	-	-	-	-	1($<5\%$)	1($<5\%$)	-	-
<i>Asphodelus ramosus (microcarpus)</i>	-	-	-	-	-	-	-	-	1($<5\%$)	1($<5\%$)
<i>Carlina hispanica</i>	+($<1\%$)	+($<1\%$)	-	-	-	-	+($<1\%$)	+($<1\%$)	-	-
<i>Cistus salvifolius</i>	1($<5\%$)	1($<5\%$)	1(5%)	1(5%)	1($<5\%$)	1($<5\%$)	1($<5\%$)	1($<5\%$)	1($<5\%$)	1($<5\%$)
<i>Cistus creticus</i>	1($<5\%$)	1($<5\%$)	1(5%)	1(5%)	1($<5\%$)	1($<5\%$)	1($<5\%$)	1($<5\%$)	1($<5\%$)	1($<5\%$)
<i>Coridothymus capitatus</i>	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	-	-	1(5%)	1(5%)

Transect	Transect 23 (T23) – Middle of the valley at the sha’ab one – path 1						Transect 24 (T24) Middle of the valley at the sha’ab one – path 1		Transect 25 (T25)- Middle of the valley opposite sha’ab one – path 1	
	Q1		Q2		Q3		Q1		Q1	
Soil type	Brown Rendzina		Light Rendzina		Light Rendzina		Brown and light Rendzina		Light Rendzina	
Habitat	Mixed habitat of oak forest and olive groves and fallow land with wide terraces		Mixed Oak and Pine forest		Mixed Pine and Oak forest		Olive groves and fallow land		Mixed Oak and Pine forest supporting batha association with many terraces	
Plant cover	Baseline: 65% plants End line: 65%		Baseline: 67% plants End line: 67%		Baseline:70% plants End line:70%		Baseline: 62% plants End line: 62%		Baseline: 60% plants End line: 60%	
Elevations above sea level	689m		692m		693m		680m		675m	
Slope	Flat		Steep		Very Steep		Flat		Very Steep	
Species	Braun and Blanquet scale									
	Base	End	Base	End	Base	End	Base	End	Base	End
<i>Crataegus aronia</i>	-	-	+(<1%)	+(<1%)	-	-	-	-	-	-
<i>Cyclamen persicum</i>	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)
<i>Fumana arabica</i>	-	-	-	-	-	-	-	-	1(<5%)	1(<5%)
<i>Gagea commutata</i>	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	-	-	-	-
<i>Helichrysum sanguineum</i>	+(<1%)	+(<1%)	-	-	-	-	+(<1%)	+(<1%)	-	-
<i>Olea europaea</i>	1(5%)	1(5%)	-	-	-	-	3(35%)	3(35%)	-	-
<i>Ononis natrix</i>	-	-	-	-	-	-	+(<1%)	+(<1%)	-	-
<i>Phagnalon rupestre</i>	+(<1%)	+(<1%)	1(<5%)	1(<5%)	+(<1%)	+(<1%)	-	-	-	-
<i>Pinus halepensis</i>	1(<5%)	1(<5%)	2(15%)	2(15%)	2(25%)	2(25%)	+(<1%)	+(<1%)	2(7%)	2(7%)
<i>Pistacia Palaestina</i>	+(<1%)	+(<1%)	+(<1%)	+(<1%)	1(<5%)	1(<5%)	+(<1%)	+(<1%)	-	-

Transect	Transect 23 (T23) – Middle of the valley at the sha'ab one – path 1						Transect 24 (T24) Middle of the valley at the sha'ab one – path 1		Transect 25 (T25)- Middle of the valley opposite sha'ab one – path 1	
	Q1	Q2	Q3	Q1	Q1	Q1	Q1	Q1	Q1	Q1
Soil type	Brown Rendzina	Light Rendzina	Light Rendzina	Brown and light Rendzina	Light Rendzina					
Habitat	Mixed habitat of oak forest and olive groves and fallow land with wide terraces	Mixed Oak and Pine forest	Mixed Pine and Oak forest	Olive groves and fallow land	Mixed Oak and Pine forest supporting batha association with many terraces					
Plant cover	Baseline: 65% plants End line: 65%	Baseline: 67% plants End line: 67%	Baseline: 70% plants End line: 70%	Baseline: 62% plants End line: 62%	Baseline: 60% plants End line: 60%					
Elevations above sea level	689m	692m	693m	680m	675m					
Slope	Flat	Steep	Very Steep	Flat	Very Steep					
Species	Braun and Blanquet scale									
	Base	End	Base	End	Base	End	Base	End	Base	End
<i>Podonosma orientalis</i>	-	-	+(<1%)	+(<1%)	-	-	-	-	-	-
<i>Quercus calliprinos</i>	2(15%)	2(15%)	2(20%)	2(20%)	2(20%)	2(20%)	1(<5%)	1(<5%)	2(22%)	2(22%)
<i>Rhamnus lycioides</i> (<i>Rhamnus palaestinus</i>)	-	-	+(<1%)	+(<1%)	+(<1%)	+(<1%)	-	-	-	-
<i>Sarcopoterium spinosum</i>	1(5%)	1(5%)	1(5%)	1(5%)	2(5%)	2(5%)	2(7%)	2(7%)	2(20%)	2(20%)
<i>Smilax aspera</i>	+(<1%)	+(<1%)	-	-	+(<1%)	+(<1%)	-	-	+(<1%)	+(<1%)
<i>Teucrium capitatum</i>	+(<1%)	+(<1%)	1(<5%)	1(<5%)	-	-	+(<1%)	+(<1%)	1(<5%)	1(<5%)
<i>Teucrium divaricatum</i>	+(<1%)	+(<1%)	1(<5%)	1(<5%)	+(<1%)	+(<1%)	-	-	+(<1%)	+(<1%)
<i>Thrinia tuberosa</i>	-	-	+(<1%)	+(<1%)	+(<1%)	+(<1%)				
<i>Thymbra spicata</i>	-	-	1(<5%)	1(<5%)	-	-	-	-	-	-
<i>Verbascum sinuatum</i>	-	-	+(<1%)	+(<1%)	-	-	-	-	-	-



Maps 3.4: Presents the distribution and geo-location of the studied transects T26, T27, T28, T29, T30, T31, T32, and T33 and their quadrats at MKV- (Western hills of Battir). Same transects were studied

Transect	Transect 26 (T26) – Eastern side of path 3				Transect 27 (T27)- Eastern side of path 3		Transect 28 (T28) –Eastern side of path 3			
	Q1		Q2		Q1		Q1		Q2	
Soil type	Terra Rossa		Mixed Terra Rossa and Rendzina (more humidity)		Mixed Terra Rossa and Rendzina		Terra Rossa		Terra Rossa	
Habitat	Olive groves supporting batha association with terraces		Olive groves supporting batha association with terraces		Olive groves supporting Garrigue- batha association with terraces		Mixed Olive groves, Oak and Pine trees supporting batha association (Pine cultivation 40-50years)		Olive groves supported with Oak and Pine trees	
Plant cover	Baseline: 60% plants End line: 63%		Baseline: 65% plants End line: 67%		Baseline: 82% plants End line: 85%		Baseline: 80% plants End line: 83%		Baseline: 69% plants End line: 72%	
Elevations above sea level	584m		597m		601m		584m		593m	
Slope	Steep		Steep		Steep		Steep		Steep	
Species	Braun and Blanquet scale									
	Base	End	Base	End	Base	End	Base	End	Base	End
<i>Allium neapolitanum</i>	-	-	-	-	+($<1\%$)	+($<1\%$)	-	-	+($<1\%$)	+($<1\%$)
<i>Amygdalus communis</i>	1($<5\%$)	2($<7\%$)	-	+($<1\%$)	+($<1\%$)	1($<5\%$)	-	-	-	-
<i>Andrachne telephioides</i>	-	-	+($<1\%$)	+($<1\%$)	-	-	-	-	-	-
<i>Andropogon distachyos</i>	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	1($<5\%$)
<i>Anemone coronaria</i>	-	-	-	-	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	-	-
<i>Arisarum vulgare</i>	-	-	-	-	-	-	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)
<i>Asparagus aphyllus</i>	1(5%)	1(5%)	-	-	1($<5\%$)	1($<5\%$)	+($<1\%$)	+($<1\%$)	-	-
<i>Asphodelus ramosus (microcarpus)</i>	-	-	-	-	+($<1\%$)	1($<5\%$)	+($<1\%$)	1($<5\%$)	-	+($<1\%$)

Transect	Transect 26 (T26) – Eastern side of path 3				Transect 27 (T27)- Eastern side of path 3		Transect 28 (T28) –Eastern side of path 3			
	Q1		Q2		Q1		Q1		Q2	
Soil type	Terra Rossa		Mixed Terra Rossa and Rendzina (more humidity)		Mixed Terra Rossa and Rendzina		Terra Rossa		Terra Rossa	
Habitat	Olive groves supporting batha association with terraces		Olive groves supporting batha association with terraces		Olive groves supporting Garrigue- batha association with terraces		Mixed Olive groves, Oak and Pine trees supporting batha association (Pine cultivation 40-50years)		Olive groves supported with Oak and Pine trees	
Plant cover	Baseline: 60% plants End line: 63%		Baseline: 65% plants End line: 67%		Baseline: 82% plants End line: 85%		Baseline: 80% plants End line: 83%		Baseline: 69% plants End line: 72%	
Elevations above sea level	584m		597m		601m		584m		593m	
Slope	Steep		Steep		Steep		Steep		Steep	
Species	Braun and Blanquet scale									
	Base	End	Base	End	Base	End	Base	End	Base	End
<i>Ballota saxatilis</i>	-	-	-	-	+($<1\%$)	+($<1\%$)	-	-	-	-
<i>Bellis sylvestris</i>	-	-	1($<5\%$)	1($<5\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	-	-
<i>Calicotome villosa</i>	-	-	-	-	-	1($<5\%$)	1($<5\%$)	2($<7\%$)	-	+($<1\%$)
<i>Campanula rapunculus</i>	-	-	-	-	-	-	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)
<i>Capparis spinosa</i>	-	-	+($<1\%$)	+($<1\%$)	-	-	-	-	-	-
<i>Carlina hispanica</i>	-	-	-	-	-	-	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)
<i>Carlina curetum</i>	-	-	-	-	-	-	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)
<i>Ceterach officinarum</i>	-	-	-	-	-	-	-	-	+($<1\%$)	+($<1\%$)
<i>Cistus salvifolius</i>	-	-	1(5%)	1(5%)	+($<1\%$)	+($<1\%$)	1($<5\%$)	2($<7\%$)	1(5%)	2($<7\%$)

Transect	Transect 26 (T26) – Eastern side of path 3				Transect 27 (T27)- Eastern side of path 3		Transect 28 (T28) –Eastern side of path 3			
	Q1		Q2		Q1		Q1		Q2	
Soil type	Terra Rossa		Mixed Terra Rossa and Rendzina (more humidity)		Mixed Terra Rossa and Rendzina		Terra Rossa		Terra Rossa	
Habitat	Olive groves supporting batha association with terraces		Olive groves supporting batha association with terraces		Olive groves supporting Garrigue- batha association with terraces		Mixed Olive groves, Oak and Pine trees supporting batha association (Pine cultivation 40-50years)		Olive groves supported with Oak and Pine trees	
Plant cover	Baseline: 60% plants End line: 63%		Baseline: 65% plants End line: 67%		Baseline: 82% plants End line: 85%		Baseline: 80% plants End line: 83%		Baseline: 69% plants End line: 72%	
Elevations above sea level	584m		597m		601m		584m		593m	
Slope	Steep		Steep		Steep		Steep		Steep	
Species	Braun and Blanquet scale									
	Base	End	Base	End	Base	End	Base	End	Base	End
<i>Cistus creticus (incanus)</i>	-	-	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	1($<5\%$)	1($<5\%$)
<i>Coridothymus capitatus</i>	-	+($<1\%$)	1(5%)	1($<5\%$)	1($<5\%$)	1($<5\%$)	+($<1\%$)	+($<1\%$)	-	-
<i>Crataegus aronia</i>	-	-	+($<1\%$)	+($<1\%$)	-	-	-	-	-	-
<i>Cyclamen persicum</i>	2(15%)	2(15%)	2(15%)	2(15%)	1($<5\%$)	2($<7\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)
<i>Cynoglossum creticum</i>	-	-	-	-	+($<1\%$)	+($<1\%$)	-	-	-	-
<i>Dianthus strictus</i>	-	-	-	-	-	-	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)
<i>Euphorbia hierosolymitana</i>	-	-	-	-	-	-	+($<1\%$)	+($<1\%$)	-	-
<i>Ferula communis</i>	-	-	-	-	-	-	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)
<i>Ficus carica</i>	+($<1\%$)	+($<1\%$)	-	-	-	-	-	-	-	-

Transect	Transect 26 (T26) – Eastern side of path 3				Transect 27 (T27)- Eastern side of path 3		Transect 28 (T28) –Eastern side of path 3			
	Q1		Q2		Q1		Q1		Q2	
Soil type	Terra Rossa		Mixed Terra Rossa and Rendzina (more humidity)		Mixed Terra Rossa and Rendzina		Terra Rossa		Terra Rossa	
Habitat	Olive groves supporting batha association with terraces		Olive groves supporting batha association with terraces		Olive groves supporting Garrigue- batha association with terraces		Mixed Olive groves, Oak and Pine trees supporting batha association (Pine cultivation 40-50years)		Olive groves supported with Oak and Pine trees	
Plant cover	Baseline: 60% plants End line: 63%		Baseline: 65% plants End line: 67%		Baseline: 82% plants End line: 85%		Baseline: 80% plants End line: 83%		Baseline: 69% plants End line: 72%	
Elevations above sea level	584m		597m		601m		584m		593m	
Slope	Steep		Steep		Steep		Steep		Steep	
Species	Braun and Blanquet scale									
	Base	End	Base	End	Base	End	Base	End	Base	End
<i>Fumana arabica</i>	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	-	-	-	-	+($<1\%$)	+($<1\%$)
<i>Gagea commutate</i>	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	-	-	+($<1\%$)	+($<1\%$)
<i>Gladiolus italicus</i>	-	-	-	-	-	-	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)
<i>Helichrysum sanguineum</i>	-	-	-	-	-	-	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)
<i>Lactuca tuberosa</i>	-	-	-	-	-	-	-	-	+($<1\%$)	+($<1\%$)
<i>Micromeria nervosa</i>	-	-	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	-	-	+($<1\%$)	+($<1\%$)
<i>Olea europaea</i>	3(25%)	3(25%)	3(25%)	3(25%)	2(25%)	2(25%)	2(20%)	2(20%)	2(25%)	2(25%)
<i>Ononis natrix</i>	-	-	-	-	-	-	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)
<i>Onopordum carduiforme</i>	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	-	-	-	-	-	-

Transect	Transect 26 (T26) – Eastern side of path 3				Transect 27 (T27)- Eastern side of path 3		Transect 28 (T28) –Eastern side of path 3			
	Q1		Q2		Q1		Q1		Q2	
Soil type	Terra Rossa		Mixed Terra Rossa and Rendzina (more humidity)		Mixed Terra Rossa and Rendzina		Terra Rossa		Terra Rossa	
Habitat	Olive groves supporting batha association with terraces		Olive groves supporting batha association with terraces		Olive groves supporting Garrigue- batha association with terraces		Mixed Olive groves, Oak and Pine trees supporting batha association (Pine cultivation 40-50years)		Olive groves supported with Oak and Pine trees	
Plant cover	Baseline: 60% plants End line: 63%		Baseline: 65% plants End line: 67%		Baseline: 82% plants End line: 85%		Baseline: 80% plants End line: 83%		Baseline: 69% plants End line: 72%	
Elevations above sea level	584m		597m		601m		584m		593m	
Slope	Steep		Steep		Steep		Steep		Steep	
Species	Braun and Blanquet scale									
	Base	End	Base	End	Base	End	Base	End	Base	End
<i>Ophrys israelitica</i> (<i>Ophrys fleischmannii</i>)	-	-	-	-	-	-	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)
<i>Paronychia argentea</i>	-	-	-	-	-	-	+($<1\%$)	+($<1\%$)	-	-
<i>Phagnalon rupestre</i>	+($<1\%$)	+($<1\%$)	-	-	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)
<i>Phalaris aquatica</i> (<i>tuberosa</i>)	-	-	-	-	-	-	+($<1\%$)	+($<1\%$)	+($<1\%$)	-
<i>Phlomis viscosa</i>	-	-	+($<1\%$)	+($<1\%$)	1($<5\%$)	1($<5\%$)	-	-	-	-
<i>Pinus halepensis</i>	+($<1\%$)	1(5%)	1($<5\%$)	1($<5\%$)	-	-	2(7%)	2(15%)	2(5%)	2(7%)
<i>Piptatherum blanchetianum</i>	-	-	-	-	+($<1\%$)	+($<1\%$)	-	-	-	-
<i>Pistacia lentiscus</i>	-	-	+($<1\%$)	+($<1\%$)	-	-	2(5%)	2(7%)	1(5%)	2(5%)
<i>Pistacia Palaestina</i>	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	-	-	-	-	-	-

Transect	Transect 26 (T26) – Eastern side of path 3				Transect 27 (T27)- Eastern side of path 3		Transect 28 (T28) –Eastern side of path 3			
	Q1		Q2		Q1		Q1		Q2	
Soil type	Terra Rossa		Mixed Terra Rossa and Rendzina (more humidity)		Mixed Terra Rossa and Rendzina		Terra Rossa		Terra Rossa	
Habitat	Olive groves supporting batha association with terraces		Olive groves supporting batha association with terraces		Olive groves supporting Garrigue- batha association with terraces		Mixed Olive groves, Oak and Pine trees supporting batha association (Pine cultivation 40-50years)		Olive groves supported with Oak and Pine trees	
Plant cover	Baseline: 60% plants End line: 63%		Baseline: 65% plants End line: 67%		Baseline: 82% plants End line: 85%		Baseline: 80% plants End line: 83%		Baseline: 69% plants End line: 72%	
Elevations above sea level	584m		597m		601m		584m		593m	
Slope	Steep		Steep		Steep		Steep		Steep	
Species	Braun and Blanquet scale									
	Base	End	Base	End	Base	End	Base	End	Base	End
<i>Podonosma orientalis</i>	-	-	-	-	-	-	+($<1\%$)	+($<1\%$)	-	-
<i>Quercus calliprinos</i>	+($<1\%$)	+($<1\%$)	1(5%)	1(5%)	1($<5\%$)	2($<7\%$)	2(10%)	2(10%)	2(10%)	2(10%)
<i>Rhamnus lycioides</i>	-	-	+($<1\%$)	+($<1\%$)	-	-	-	-	+($<1\%$)	+($<1\%$)
<i>Rubia tenuifolia</i>	+($<1\%$)	+($<1\%$)	-	-	-	-	-	-	+($<1\%$)	+($<1\%$)
<i>Sarcopoterium spinosum</i>	-	+($<1\%$)	-	+($<1\%$)			-	-	+($<1\%$)	1($<5\%$)
<i>Scorzonera papposa</i>	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	-	-	-	-	-	-
<i>Scrophularia hierochuntina</i>	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	-	-	-	-	-	-
<i>Smilax aspera</i>	+($<1\%$)	+($<1\%$)	-	-	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)
<i>Taraxacum cyprium</i>	-	-	-	-	-	-	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)
<i>Teucrium capitatum</i>	-	-	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	-	-	-	-

Transect	Transect 26 (T26) – Eastern side of path 3				Transect 27 (T27)- Eastern side of path 3		Transect 28 (T28) –Eastern side of path 3			
	Q1		Q2		Q1		Q1		Q2	
Soil type	Terra Rossa		Mixed Terra Rossa and Rendzina (more humidity)		Mixed Terra Rossa and Rendzina		Terra Rossa		Terra Rossa	
Habitat	Olive groves supporting batha association with terraces		Olive groves supporting batha association with terraces		Olive groves supporting Garrigue- batha association with terraces		Mixed Olive groves, Oak and Pine trees supporting batha association (Pine cultivation 40-50years)		Olive groves supported with Oak and Pine trees	
Plant cover	Baseline: 60% plants End line: 63%		Baseline: 65% plants End line: 67%		Baseline: 82% plants End line: 85%		Baseline: 80% plants End line: 83%		Baseline: 69% plants End line: 72%	
Elevations above sea level	584m		597m		601m		584m		593m	
Slope	Steep		Steep		Steep		Steep		Steep	
Species	Braun and Blanquet scale									
	Base	End	Base	End	Base	End	Base	End	Base	End
<i>Teucrium divaricatum</i>	-	-	-	-	1(<5%)	1(<5%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)
<i>Thrinicia Tuberosa</i>	-	-	+(<1%)	+(<1%)	-	-	-	-	-	-
<i>Thymbra spicata</i>	-	-	-	-	+(<1%)	+(<1%)	-	-	-	-
<i>Tolpis virgate</i>	-	-	-	-	-	-	-	-	+(<1%)	+(<1%)
<i>Verbascum sinuatum</i>	-	-	+(<1%)	+(<1%)	-	-	-	-	-	-

Transect	Transect 29(T29)				Transect 30 (T30)				Transect 31 (T31)			
	Q1		Q2		Q1		Q2		Q1		Q2	
Soil type	Mixed patches of Terra Rossa and Rendzina		Terra Rossa		Terra Rossa		Mixed patches of Terra Rossa and Rendzina		Mixed patches of Terra Rossa and Rendzina		Mixed patches of Terra Rossa and Rendzina	
Habitat	Mixed man made Pine forest and Oak trees supporting garrigue-batha association		Mixed man made Pine forest and Oak trees supporting batha association		Mixed man made Pine forest and Oak trees supporting batha association		Mixed man made Pine forest and Oak trees supporting garrigue-batha association		Oak forest supporting Batha association with excess of Pine reseeding		Oak forest supporting Batha association with excess of Pine reseeding	
Plant cover	Baseline: 78% plants End line: 83%		Baseline: 75% plants End line: 80%		Baseline: 75% plants End line: 80%		Baseline: 80% plants End line: 83%		Baseline: 60% plants End line: 65%		Baseline: 58% End line: 63%	
Elevations above sea level	579m		586m		579m		582m		565m		569m	
Slope	Steep		Steep		Steep		Steep		Steep		Steep	
Species	Braun and Blanquet scale											
	Base	End	Base	End	Base	End	Base	End	Base	End	Base	End
<i>Allium neapolitanum</i>	+(<1%)	+(<1%)	+(<1%)	+(<1%)	-	-	-	-	-	-	-	-
<i>Anacamptis papilionacea</i> <i>(Orchis papilionacea)</i>	+(<1%)	1(5%)	+(<1%)	+(<1%)	-	-	-	-	-	+(<1%)	-	-
<i>Anacamptis pyramidalis</i> <i>(Orchid pyramidalis)</i>	-	-	+(<1%)	+(<1%)	+(<1%)	+(<1%)	-	-	-	+(<1%)	-	-
<i>Andrachne telephioides</i>	-	-	-	-	-	-	+(<1%)	1(<5%)	-	-	-	-
<i>Andropogon distachyos</i>	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)
<i>Anemone coronaria</i>	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)
<i>Asphodelus ramosus</i> <i>(microcarpus)</i>	-	-	+(<1%)	+(<1%)	+(<1%)	+(<1%)	-	-	-	-	-	-
<i>Bellis sylvestris</i>	+(<1%)	+(<1%)	-	-	-	-	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)
<i>Calicotome villosa</i>	1(5%)	1(5%)	1(<5%)	2(<7%)	1(<5%)	2(<7%)	1(<5%)	1(<5%)	1(<5%)	1(<5%)	1(<5%)	2(<7%)

Transect	Transect 29(T29)				Transect 30 (T30)				Transect 31 (T31)			
	Q1		Q2		Q1		Q2		Q1		Q2	
Soil type	Mixed patches of Terra Rossa and Rendzina		Terra Rossa		Terra Rossa		Mixed patches of Terra Rossa and Rendzina		Mixed patches of Terra Rossa and Rendzina		Mixed patches of Terra Rossa and Rendzina	
Habitat	Mixed man made Pine forest and Oak trees supporting garrigue-batha association		Mixed man made Pine forest and Oak trees supporting batha association		Mixed man made Pine forest and Oak trees supporting batha association		Mixed man made Pine forest and Oak trees supporting garrigue-batha association		Oak forest supporting Batha association with excess of Pine reseeding		Oak forest supporting Batha association with excess of Pine reseeding	
Plant cover	Baseline: 78% plants End line: 83%		Baseline: 75% plants End line: 80%		Baseline: 75% plants End line: 80%		Baseline: 80% plants End line: 83%		Baseline: 60% plants End line: 65%		Baseline: 58% End line: 63%	
Elevations above sea level	579m		586m		579m		582m		565m		569m	
Slope	Steep		Steep		Steep		Steep		Steep		Steep	
Species	Braun and Blanquet scale											
	Base	End	Base	End	Base	End	Base	End	Base	End	Base	End
<i>Carlina hispanica</i>	+(<1%)	+(<1%))	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	-	-	-	-
<i>Carlina curetum</i>	+(<1%)	+(<1%))	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	-	-	-	-
<i>Crataegus aronia</i>	+(<1%)	1(<5%))	+(<1%)	+(<1%)	-	-	-	-	-	-	-	-
<i>Ceratonia siliqua</i>	-	-	+(<1%)	+(<1%)	+(<1%)	+(<1%)	-	-	-	-	-	-
<i>Cistus salvijfolius</i>	1(<5%)	1(<5%))	1(<5%)	2(7%)	1(<5%)	2(<7%)	1(<5%)	1(<5%)	2(7%)	2(7%)	2(7%)	2(7%)
<i>Cistus creticus</i>	1(<5%)	1(<5%))	1(<5%)	2(<7%)	1(5%)	1(5%)	1(<5%)	1(<5%)	1(<5%)	1(<5%)	1(<5%)	1(<5%)
<i>Coridothymus capitatus</i>	1(<5%)	1(<5%))	-	-	-	-	1(<5%)	2(<7%)	1(<5%)	2(7%)	1(<5%)	2(7%)
<i>Cyclamen persicum</i>	+(<1%)	+(<1%))	+(<1%)	1(<5%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)
<i>Erodium acaule</i>	-	-	-	-	-	-	-	-	+(<1%)	+(<1%)	+(<1%)	+(<1%)

Transect	Transect 29(T29)				Transect 30 (T30)				Transect 31 (T31)			
	Q1		Q2		Q1		Q2		Q1		Q2	
Soil type	Mixed patches of Terra Rossa and Rendzina		Terra Rossa		Terra Rossa		Mixed patches of Terra Rossa and Rendzina		Mixed patches of Terra Rossa and Rendzina		Mixed patches of Terra Rossa and Rendzina	
Habitat	Mixed man made Pine forest and Oak trees supporting garrigue-batha association		Mixed man made Pine forest and Oak trees supporting batha association		Mixed man made Pine forest and Oak trees supporting batha association		Mixed man made Pine forest and Oak trees supporting garrigue-batha association		Oak forest supporting Batha association with excess of Pine reseeding		Oak forest supporting Batha association with excess of Pine reseeding	
Plant cover	Baseline: 78% plants End line: 83%		Baseline: 75% plants End line: 80%		Baseline: 75% plants End line: 80%		Baseline: 80% plants End line: 83%		Baseline: 60% plants End line: 65%		Baseline: 58% End line: 63%	
Elevations above sea level	579m		586m		579m		582m		565m		569m	
Slope	Steep		Steep		Steep		Steep		Steep		Steep	
Species	Braun and Blanquet scale											
	Base	End	Base	End	Base	End	Base	End	Base	End	Base	End
<i>Eryngium creticum</i>	-	-	+(<1%)	+(<1%)	+(<1%)	+(<1%)	-	-	+(<1%)	+(<1%)	+(<1%)	+(<1%)
<i>Ephedra aphylla</i>	-	-	-	-	-	-	-	-	-	+(<1%)	-	-
<i>Fumana arabica</i>	+(<1%)	+(<1%)	-	-	-	-	+(<1%)	+(<1%)	-	-	-	-
<i>Gagea commutata</i>	-	-	+(<1%)	+(<1%)	+(<1%)	+(<1%)	-	-	+(<1%)	+(<1%)	+(<1%)	+(<1%)
<i>Helichrysum sanguineum</i>	+(<1%)	+(<1%)	-	-	-	-	-	-	+(<1%)	+(<1%)	+(<1%)	+(<1%)
<i>Micromeria nervosa</i>	+(<1%)	+(<1%)	-	-	-	-	+(<1%)	+(<1%)	-	-	-	-
<i>Olea europaea</i>	-	-	+(<1%)	+(<1%)	+(<1%)	+(<1%)	-	-	1(5%)	1(5%)	1(5%)	1(5%)
<i>Osyris alba</i>	-	-	-	-	-	-	+(<1%)	+(<1%)	-	-	-	-
<i>Phagnalon rupestre</i>	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)

Transect	Transect 29(T29)				Transect 30 (T30)				Transect 31 (T31)			
	Q1		Q2		Q1		Q2		Q1		Q2	
Soil type	Mixed patches of Terra Rossa and Rendzina		Terra Rossa		Terra Rossa		Mixed patches of Terra Rossa and Rendzina		Mixed patches of Terra Rossa and Rendzina		Mixed patches of Terra Rossa and Rendzina	
Habitat	Mixed man made Pine forest and Oak trees supporting garrigue-batha association		Mixed man made Pine forest and Oak trees supporting batha association		Mixed man made Pine forest and Oak trees supporting batha association		Mixed man made Pine forest and Oak trees supporting garrigue-batha association		Oak forest supporting Batha association with excess of Pine reseeding		Oak forest supporting Batha association with excess of Pine reseeding	
Plant cover	Baseline: 78% plants End line: 83%		Baseline: 75% plants End line: 80%		Baseline: 75% plants End line: 80%		Baseline: 80% plants End line: 83%		Baseline: 60% plants End line: 65%		Baseline: 58% End line: 63%	
Elevations above sea level	579m		586m		579m		582m		565m		569m	
Slope	Steep		Steep		Steep		Steep		Steep		Steep	
Species	Braun and Blanquet scale											
	Base	End	Base	End	Base	End	Base	End	Base	End	Base	End
<i>Phlomis viscosa</i>	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	-	-	-	-	-	-	-	-
<i>Pinus halepensis</i>	2(15%)	2(20%)	2(15%)	2(20%)	2(10%)	2(15%)	2(15%)	2(20%)	2(7%)	2(7%)	2(7%)	2(10%)
<i>Pistacia lentiscus</i>	1(5%)	1(5%)	+($<1\%$)	+($<1\%$)	+($<1\%$)	1($<5\%$)	1(5%)	1(5%)	-	-	-	-
<i>Pistacia Palaestina</i>	-	-	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	-	-	+($<1\%$)	1($<5\%$)	+($<1\%$)	+($<1\%$)
<i>Quercus calliprinos</i>	2(10%)	2(10%)	2(15%)	2(15%)	2(15%)	2(20%)	2(10%)	2(12%)	2(5%)	2(5%)	2(7%)	2(7%)
<i>Rhus coriaria</i>	-	-	-	-	+($<1\%$)	1($<5\%$)	-	-	-	-	-	-
<i>Rubia tenuifolia</i>	-	-	+($<1\%$)	+($<1\%$)	+($<1\%$)	+($<1\%$)	-	-	-	-	-	-
<i>Sarcopoterium spinosum</i>	2(7%)	2(7%)	2(20%)	2(20%)	2(20%)	2(20%)	2(7%)	2(7%)	2(12%)	2(12%)	2(10%)	2(10%)

Transect	Transect 29(T29)				Transect 30 (T30)				Transect 31 (T31)			
	Q1		Q2		Q1		Q2		Q1		Q2	
Soil type	Mixed patches of Terra Rossa and Rendzina		Terra Rossa		Terra Rossa		Mixed patches of Terra Rossa and Rendzina		Mixed patches of Terra Rossa and Rendzina		Mixed patches of Terra Rossa and Rendzina	
Habitat	Mixed man made Pine forest and Oak trees supporting garrigue-batha association		Mixed man made Pine forest and Oak trees supporting batha association		Mixed man made Pine forest and Oak trees supporting batha association		Mixed man made Pine forest and Oak trees supporting garrigue-batha association		Oak forest supporting Batha association with excess of Pine reseeding		Oak forest supporting Batha association with excess of Pine reseeding	
Plant cover	Baseline: 78% plants End line: 83%		Baseline: 75% plants End line: 80%		Baseline: 75% plants End line: 80%		Baseline: 80% plants End line: 83%		Baseline: 60% plants End line: 65%		Baseline: 58% End line: 63%	
Elevations above sea level	579m		586m		579m		582m		565m		569m	
Slope	Steep		Steep		Steep		Steep		Steep		Steep	
Species	Braun and Blanquet scale											
	Base	End	Base	End	Base	End	Base	End	Base	End	Base	End
<i>Sedum sediforme</i>	+(<1%)	+(<1%))	+(<1%)	+(<1%)	-	-	-	-	-	-	-	-
<i>Smilax aspera</i>	+(<1%)	1(<5%))	-	-	-	-	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)
<i>Taraxacum cyprium</i>	-	-	-	-	-	-	-	-	+(<1%)	+(<1%)	+(<1%)	+(<1%)
<i>Teucrium capitatum</i>	+(<1%)	+(<1%))	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)
<i>Teucrium divaricatum</i>	+(<1%)	+(<1%))	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)
<i>Tolips virgate</i>	-	-	+(<1%)	+(<1%)	+(<1%)	+(<1%)	-	-	+(<1%)	+(<1%)	+(<1%)	+(<1%)
<i>Thrinicia Tuberosa</i>	-	-	+(<1%)	+(<1%)	+(<1%)	+(<1%)	-	-	-	-	-	-
<i>Thymbra spicata</i>	+(<1%)	+(<1%))	+(<1%)		+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)	+(<1%)
<i>Trifolium boissieri</i>	-	-	-	-	+(<1%)	+(<1%)	+(<1%)	+(<1%)	-	-	-	-

Transect	Transect 32(T32) –southern side of path 3		Transect 33 (T33) – southern side of path 3	
	Q1		Q1	
Soil type	Terra Rossa		Terra Rossa	
Habitat	Olive Groves and Fallow Land		Olive Groves and Fallow Land	
Plant cover	Baseline: 58% plants End line: 58%		Baseline: 57% plants End line: 57%	
Elevations above sea level	550m		551m	
Slope	Flat		Flat	
Species	Braun and Blanquet scale			
	Base line	End line	Baseline	End line
<i>Andropogon distachyos</i>	+(<1%)	+(<1%)	+(<1%)	+(<1%)
<i>Anemone coronaria</i>	+(<1%)	+(<1%)	+(<1%)	+(<1%)
<i>Anacamptis pyramidalis</i>	+(<1%)	+(<1%)	-	-
<i>Asparagus aphyllus</i>	+(<1%)	+(<1%)	+(<1%)	+(<1%)
<i>Bellis sylvestris</i>	+(<1%)	+(<1%)	+(<1%)	+(<1%)
<i>Calicotome villosa</i>	+(<1%)	+(<1%)	+(<1%)	+(<1%)
<i>Carlina hispanica</i>	+(<1%)	+(<1%)	+(<1%)	+(<1%)
<i>Carlina curetum</i>	+(<1%)	+(<1%)	+(<1%)	+(<1%)
<i>Cyclamen persicum</i>	+(<1%)	+(<1%)	+(<1%)	+(<1%)
<i>Dittrichia viscosa</i> (<i>Inula viscosa</i>)	+(<1%)	+(<1%)	-	-
<i>Helichrysum sanguineum</i>	+(<1%)	+(<1%)	+(<1%)	+(<1%)

Transect	Transect 32(T32) –southern side of path 3		Transect 33 (T33) – southern side of path 3	
	Q1		Q1	
Soil type	Terra Rossa		Terra Rossa	
Habitat	Olive Groves and Fallow Land		Olive Groves and Fallow Land	
Plant cover	Baseline: 58% plants End line: 58%		Baseline: 57% plants End line: 57%	
Elevations above sea level	550m		551m	
Slope	Flat		Flat	
Species	Braun and Blanquet scale			
	Base line	End line	Baseline	End line
<i>Olea europaea</i>	3(35%)	3(35%)	3(40%)	3(40%)
<i>Phagnalon rupestre</i>	+(<1%)	+(<1%)	+(<1%)	+(<1%)
<i>Pistacia Palaestina</i>	+(<1%)	+(<1%)	+(<1%)	+(<1%)
<i>Salvia hierosolymitana</i>	+(<1%)	+(<1%)	+(<1%)	+(<1%)
<i>Salvia Palaestina</i>	+(<1%)	+(<1%)	-	-
<i>Sarcopoterium spinosum</i>	1(5%)	1(5%)	1(5%)	1(5%)
<i>Smilax aspera</i>	+(<1%)	+(<1%)	+(<1%)	+(<1%)
<i>Taraxacum cyprium</i>	+(<1%)	+(<1%)	-	-
<i>Thrinicia Tuberosa</i>	+(<1%)	+(<1%)	+(<1%)	+(<1%)
<i>Trifolium boissieri</i>	+(<1%)	+(<1%)	-	-
<i>Verbascum sinuatum</i>	+(<1%)	+(<1%)	+(<1%)	+(<1%)

Annex 2: Coordinates of the Studied Transects at Al Makhroul Valley

T1	T1C1 31°42'52.30"N 35°10'13.40"E	T1C2 31°42'55.30"N 35°10'13.00"E	T1C3 31°42'54.10"N 35°10'15.10"E	T1C4 31°42'49.84"N 35°10'17.42"E
T2	T2C1 31°42'52.08"N 35°10'17.16"E	T2C2 31°42'49.60"N 35°10'14.75"E	T2C3 31°42'51.86"N 35°10'14.38"E	T2C4 31°42'49.84"N 35°10'17.42"E
T3	T3C1 31°42'49.68"N 35°10'9.72"E	T3C2 31°42'46.56"N 35°10'10.86"E	T3C3 31°42'48.66"N 35°10'12.08"E	T3C4 31°42'47.70"N 35°10'8.52"E
T4	T4C1 31°42'55.70"N 31°42'55.70"E	T4C2 31°42'58.50"N 35°10'3.50"E	T4C3 31°42'57.76"N 35°10'5.99"E	T4C4 31°42'56.54"N 35°10'2.27"E
T5	T5C1 31°42'59.70"N 35° 9'59.10"E	T5C2 31°43'2.78"N 35° 9'58.84"E	T5C3 31°43'1.42"N 35°10'1.00"E	T5C4 31°43'1.80"N 35° 9'56.49"E
T6	T6C1 31°42'58.93"N 35° 9'56.70"E	T6C2 31°42'56.34"N 35° 9'59.26"E	T6C3 31°42'58.46"N 35° 9'59.36"E	T6C4 31°42'56.60"N 35° 9'56.78"E
T7	T7C1 31°42'59.92"N 35° 9'55.45"E	T7C2 31°43'1.58"N 35° 9'51.28"E	T7C3 31°43'1.61"N 35° 9'53.74"E	T7C4 31°42'59.78"N 35° 9'52.75"E
T8	T8C1 31°43'5.16"N 35° 9'47.75"E	T8C2 31°43'5.14"N 35° 9'43.83"E	T8C3 31°43'4.05"N 35° 9'45.64"E	T8C4 31°43'6.62"N 35° 9'45.88"E
T9	T9C1 31°42'44.27"N 35°10'7.41"E	T9C2 31°42'46.84"N 35°10'5.04"E	T9C3 31°42'44.63"N 35°10'4.81"E	T9C4 31°42'46.52"N 35°10'7.31"E
T10	T10C1 31°42'50.47"N 35°10'6.63"E	T10C2 31°42'51.43"N 35°10'3.20"E	T10C3 31°42'49.33"N 35°10'4.49"E	T10C4 31°42'52.27"N 35°10'5.80"E
T11	T11C1 31°42'53.70"N 35° 9'58.40"E	T11C2 31°42'53.80"N 35°10'2.11"E	T11C3 31°42'52.15"N 35°10'0.36"E	T11C4 31°42'55.11"N 35°10'0.26"E
T12	T12C1 31°42'55.40"N 35° 9'40.02"E	T12C2 31°42'55.28"N 35° 9'43.80"E	T12C3 31°42'56.88"N 35° 9'42.40"E	T12C4 31°42'53.48"N 35° 9'41.41"E
T13	T13C1	T13C2	T13C3	T13C4

	31°42'57.00"N 35° 9'39.01"E	31°42'58.82"N 35° 9'37.47"E	31°42'58.79"N 35° 9'40.35"E	31°43'0.56"N 35° 9'38.77"E
T14	T14C1 31°42'56.32"N 35° 9'22.33"E	T14C2 31°42'57.57"N 35° 9'25.80"E	T14C3 31°42'58.24"N 35° 9'23.73"E	T14C4 31°42'55.40"N 35° 9'24.70"E
T15	T15C1 31°43'1.60"N 35° 9'6.51"E	T15C2 31°43'0.96"N 35° 9'2.57"E	T15C3 31°43'0.02"N 35° 9'4.89"E	T15C4 31°43'2.61"N 35° 9'4.03"E
T16	T16C1 31°43'26.20"N 35° 8'53.80"E	T16C2 31°43'25.41"N 35° 8'50.33"E	T16C3 31°43'27.37"N 35° 8'52.01"E	T16C4 31°43'24.55"N 35° 8'51.95"E
T17	T17C1 31°43'38.95"N 35° 8'46.43"E	T17C2 31°43'37.71"N 35° 8'50.08"E	T17C3 31°43'37.05"N 35° 8'48.51"E	T17C4 31°43'39.98"N 35° 8'47.82"E
T18	T18C1 31°43'27.92"N 35° 9'1.66"E	T18C2 31°43'30.40"N 35° 8'59.55"E	T18C3 31°43'30.24"N 35° 9'1.46"E	T18C4 31°43'28.06"N 35° 9'0.07"E
T19	T19C1 31°43'28.91"N 35° 8'57.72"E	T19C2 31°43'26.73"N 35° 9'0.24"E	T19C3 31°43'26.82"N 35° 8'58.30"E	T19C4 31°43'28.43"N 35° 8'59.62"E
T20	T20C1 31°43'11.74"N 35° 9'3.78"E	T20C2 31°43'11.24"N 35° 9'0.35"E	T20C3 31°43'9.23"N 35° 9'2.56"E	T20C4 31°43'13.25"N 35° 9'1.44"E
T21	T21C1 31°43'11.53"N 35° 9'4.15"E	T21C2 31°43'11.49"N 35° 9'6.88"E	T21C3 31°43'9.64"N 35° 9'4.60"E	T21C4 31°43'13.71"N 35° 9'6.35"E
T22	T22C1 31°43'14.26"N 35° 9'14.53"E	T22C2 31°43'15.89"N 35° 9'18.98"E	T22C3 31°43'14.01"N 35° 9'17.77"E	T22C4 31°43'16.09"N 35° 9'15.62"E
T23	T23C1 31°43'13.58"N	T23C2 31°43'10.52"N	T23C3 31°43'11.63"N	T23C4 31°43'13.37"N

	35° 9'32.58"E	35° 9'32.98"E	35° 9'34.71"E	35° 9'29.94"E
T24	T24C1 31°43'13.00"N 35° 9'34.00"E	T24C2 31°43'16.44"N 35° 9'32.50"E	T24C3 31°43'14.33"N 35° 9'31.79"E	T24C4 31°43'15.12"N 35° 9'35.01"E
T25	T25C1 31°43'16.60"N 35° 9'33.50"E	T25C2 31°43'17.71"N 35° 9'35.47"E	T25C3 31°43'18.57"N 35° 9'33.08"E	T25C4 31°43'15.49"N 35° 9'35.85"E
T26	T26C1 31°43'50.37"N 35° 8'18.12"E	T26C2 31°43'49.58"N 35° 8'15.08"E	T26C3 31°43'53.08"N 35° 8'16.44"E	T26C4 31°43'47.68"N 35° 8'17.10"E
T27	T27C1 31°43'58.30"N 35° 8'14.88"E	T27C2 31°44'0.94"N 35° 8'12.36"E	T27C3 31°44'1.58"N 35° 8'14.31"E	T27C4 31°43'58.27"N 35° 8'12.30"E
T28	T28C1 31°44'6.55"N 35° 8'13.60"E	T28C2 31°44'6.63"N 35° 8'10.12"E	T28C3 31°44'8.08"N 35° 8'11.07"E	T28C4 31°44'5.04"N 35° 8'12.27"E
T29	T29C1 31°44'5.44"N 35° 7'56.27"E	T29C2 31°44'2.01"N 35° 7'54.31"E	T29C3 31°44'4.18"N 35° 7'53.50"E	T29C4 31°44'3.16"N 35° 7'57.46"E
T30	T30C1 31°44'1.03"N 35° 7'48.98"E	T30C2 31°43'57.78"N 35° 7'48.57"E	T30C3 31°43'59.41"N 35° 7'46.93"E	T30C4 31°43'59.19"N 35° 7'50.14"E
T31	T31C1 31°43'57.76"N 35° 7'43.43"E	T31C2 31°43'55.65"N 35° 7'44.80"E	T31C3 31°43'55.24"N 35° 7'42.22"E	T31C4 31°43'57.49"N 35° 7'45.80"E
T32	T32C1 31°43'56.90"N 35° 7'39.20"	T32C2 31°43'52.82"N 35° 7'37.14"E	T32C3 31°43'55.65"N 35° 7'36.45"E	T32C4 31°43'53.92"N 35° 7'40.02"E
T33	T33C1 31°43'44.64"N 35° 7'38.58"E	T33C2 31°43'40.31"N 35° 7'38.80"E	T33C3 31°43'42.83"N 35° 7'37.08"E	T33C4 31°43'42.58"N 35° 7'40.65"E

