

Supplementary Information

Studying Ancient Anthropogenic Impacts on Current Floral Biodiversity in the Southern Levant as reflected by the Philistine Migration

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Table S1: Structure of archaeobotanical data for Bronze and Iron Age Sites.

Site Name	Bronze Age			Iron Age			
	Contexts	NN Taxa	NN Plant Remains	Culture	Context	NN Taxa	NN Plant Remains
Afula	Pit, 3 other loci	9	no data	nonPhil	Storage jars	6	41
Aphek	Halls in building, governor palace, street, winepress	81	29180	Phil	Building, dump pits, threshing floor	110	3620
				nonPhil	Settlement, 5 pits, silos, intact jars with grains	50	21398
Arad	Various strata within building - kitchen-storeroom, bins, pithoi, jars	22	60 kg	nonPhil	Various loci from occupation layers	5	>61
Ashdod	2 loci from occupation levels and installation, refuse dump by installation	9	713	0		0	
Ashkelon		0		Phil	Administrative center, counting house, shops, streets, silo, warehouse magazines	178	19,543
Be'er Sheba		0		nonPhil	Various loci from occupation Layers	5	ca 30
Beth Shean	Occupation strata, 13 L	53	36768	nonPhil	Building, destruction debris on floor	33	150559

City of David		0		nonPhil	Occupation Layers	12	no data
Dalit	Domestic area	1	no data	0		0	
Ekron	Destruction debris, vessel, storage jar	51	924	Phil	Room floor, pit, fill, fireplaces	91	6940
Rosh Zayit		0		nonPhil	Jars in storeroom	40	184440
Ifshar	Grain` storeroom, food prep. area, courtyard	11	32106	nonPhil	Storage pit near house, 2 other storage pits	15	847
Jericho	silo, 7 tombs, room, pot, 3 shafts, etc.	56	ND	0		0	
Kedesh		0		nonPhil	Pit sealed under floor	1	2
Keisan		0		nonPhil	Silo	9	5235
Lachish	ND	12	167 cm ³	nonPhil	ND	10	300 cm3
Manahat	Sealed contexts on floor, fireplaces and around them	17	411	0		0	
Megiddo	Accumulation on floors, pits, bone accumulation in the temple compound, burials, refuse deposit, plaster floor	28	816	nonPhil	Floors, pits, various installations, buildings. floor, destruction layer, large storage jar	23	348
Qasile		0		Phil	Destruction debris under temple, and adjacent 2 buildings	16	13303
Ramat Matred		0		nonPhil	Occupation Layers	1	1
Safi/Gath	Accumulation floor in building, room	15	249	Phil	Destruction debris, room floor	34	1003
Shiloh	ND, 8 loci	21	357	nonPhil	Silo, 2 loci out of 74 loci	33	22952
Shiqmim	22 samples - lower village building phase	5	22	0		0	
Ta`anach	ND, 7 loci	19	ND	nonPhil	ND, 6 loci	9	ND

Batash	Building, sealed jar, etc at least 3 loci	55	220761	nonPhil	ND, 10 loci	1	ND
				Phil	ND, 9 loci	1	ND
Rehov		0		nonPhil	9 different loci	1	200

Each site is characterized by time period (Bronze Age and Iron Age), cultural affinity of Iron Age Strata (Philistine or non-Philistine), context contained remains of seeds and fruits, number of taxa recognized, and number of plant remains analyzed. Phil – Philistine Strata; nonPhil – other than Philistine Strata within the Iron Age. ND – no data in publication.

Table S2: The archaeobotanical record of Southern Levant in Bronze and Iron Ages. Data based on studies of remnants of flowers, fruits, and seeds. Species ecology is denoted as cult = cultivated species; w/w = wild and/ or weed species. Iron Age Aphek contains both Philistine (Phil) and non-Philistine (nonPhil) strata.

List of Taxa	Ecology	Bronze Age	Iron Age Phil	Iron Age nonPhil
<i>Adonis</i> sp.		Aphek ^{1,2} Manahat ³ Safi/Gath ^{2,4}	Aphek ^{1,2} Ashkelon ^{2,5} Safi/Gath ^{2,4}	-
<i>Adonis dentata</i>	w/w	Shiqmim ⁶	-	-
<i>Adonis dentata/microcarpa</i>	w/w	-	Ashkelon ⁵	-
<i>Aegilops geniculata/peregrina</i>	w/w	-	-	Beth Shean ⁷
<i>Aegilops</i> sp.	w/w	Shiqmim ⁶	Ashkelon ⁵	-
<i>Aira elengatissima</i>	w/w	-	Safi/Gath ^{2,4}	-
<i>Alkanna strigosa</i>	w/w	-	-	Beth Shean ⁷
<i>Amaranthus</i> sp.	w/w	-	-	Megiddo ⁸
<i>Ammi majus</i>	w/w	-	Aphek ^{1,2}	-
<i>Amygdalus communis</i>	w/w	Ta'anach ⁹	Ashkelon ^{10,11,5}	City of David ¹²
<i>Anagallis arvensis/foemina</i>	w/w	-	Ashkelon ²	-
<i>Anagallis arvensis</i>	w/w	Aphek ^{1,2}	Aphek ^{1,2} Ashkelon ^{2,5} Ekron ² Safi/Gath ^{2,4}	Aphek ² Beth Shean ⁷
<i>Anagallis</i> sp.	w/w	Megiddo ⁸	-	Megiddo ⁸
<i>Androcymbium palaestinum</i>	w/w	-	Ashkelon ⁵	-
<i>Anthemis bornmuelleri</i>	w/w	-	Ekron ²	-
<i>Anthemis cotula/parvifolia</i>	w/w	-	Ashkelon ⁵	-
<i>Anthemis palestina</i>	w/w	Batash ¹³	Ashkelon ²	-
<i>Anthemis pseudocotula</i>	w/w	-	Ashkelon ^{2,10,11,5} Ekron ²	-
<i>Anthemis tinctoria</i>	w/w	Beth Shean ¹⁴	-	-
<i>Apium graveolens</i>	w/w	Beth Shean ¹⁴	-	-
<i>Apium nodiflorum</i>	w/w	-	Aphek ^{1,2}	Aphek ^{1,2}
<i>Arnebia decumbens</i>	w/w	Shiqmim ⁶	Ashkelon ^{10,11,5}	-
<i>Arrhenatherum palaestinum</i>	w/w	-	Ekron ²	-

<i>Arundo</i> sp.		-	Ekron ²	-
<i>Asperula arvensis/Galium tricornutum</i>	w/w	Batash ¹³	-	-
<i>Asperula</i> sp.		Batash ¹³	-	-
<i>Asphodelus tenuifolius</i>	w/w	-	Ashkelon ²	-
<i>Astragalus asterias</i>	w/w	Aphek ^{1,2}	Aphek ^{1,2} Ashkelon ²	Aphek ²
<i>Astragalus hamosus</i>	w/w	-	Aphek ^{1,2} Ekron ²	-
<i>Astragalus macrocarpus/aleppicus</i>	w/w	-	Ekron ²	-
<i>Astragalus</i> sp.		Aphek ^{1,2} Ifshar ^{15, 16} Safi/Gath ^{2,4}	Aphek ^{1,2} Ashkelon ⁵ Ekron ² Safi/Gath ^{2,4}	-
<i>Avena barbata</i>	w/w	Aphek ^{1,2} Batash ¹³	Aphek ^{1,2} Ashkelon ^{2,5}	-
<i>Avena barbata/sterilis</i>	w/w	Aphek ^{1,2}	Aphek ^{1,2}	Aphek ^{1,2}
<i>Avena sterilis</i>	w/w	Aphek ^{1,2} Batash ¹³ Ekron ²	-	Aphek ^{1,2}
<i>Avena</i> sp.		Afula ¹⁷ Batash ¹³ Beth Shean ¹⁴ Ifshar ^{15, 16} Jericho ¹⁸ Manahat ³ Shiqmim ⁶	Ekron ²	Rosh Zayit ¹⁹ Shiloh ²⁰
<i>Bellevalia eigii/flexuosa/warburgii</i>	w/w	-	Ashkelon ⁵	-
<i>Bellevalia flexuosa</i>	w/w	Aphek ^{1,2}	Aphek ^{1,2} Ashkelon ^{2,5} Ekron ²	Rosh Zayit ¹⁹
<i>Bellevalia</i> sp. and <i>Bellevalia/Muscari</i>		Aphek ² Batash ¹³	Ashkelon ² Ekron ²	Aphek ^{1,2} Beth Shean ⁷ Shiloh ²⁰
<i>Beta vulgaris</i>	w/w	Aphek ^{1,2}	Aphek ^{1,2} Ashkelon ^{2,5}	-
<i>Brachypodium distachyon</i>	w/w	Aphek ^{1,2} Ekron ²	Aphek ^{1,2} Ashkelon ^{2,5} Ekron ²	Aphek ^{1,2} Beth Shean ⁷ Rosh Zayit ¹⁹ Shiloh ²⁰
<i>Brassica nigra</i>	w/w	Ekron ²	Aphek ^{1,2}	-
<i>Bromus alopecuroides</i>	w/w	Aphek ^{1,2}	-	-
<i>Bromus alopecuroides/lanceolatus</i>	w/w	-	-	Rosh Zayit ¹⁹
<i>Bromus diandrus</i>	w/w	-	Aphek ^{1,2}	-
<i>Bromus tigris/pseudobrachystachys</i>		-	Aphek ^{1,2}	-
<i>Bromus</i> sp.		Aphek ^{1,2} Arad ²¹ Batash ¹³ Jericho ¹⁸	Aphek ¹ Ashkelon ^{2,5} Ekron ²	Megiddo ⁸
<i>Buglossoides arvensis</i>	w/w	-	Ashkelon ^{2, 10, 11, 5} Ekron ²	Beth Shean ⁷
<i>Buglossoides tenuiflora</i>	w/w	Beth Shean ¹⁴	Ashkelon ^{2, 5} Ekron ²	-
<i>Bupleurum lancifolium</i>	w/w	Beth Shean ¹⁴ Ifshar ^{15, 16}	Ashkelon ⁵	Beth Shean ⁷ Rosh Zayit ¹⁹ Shiloh ¹³

<i>Bupleurum subovatum</i>	w/w	Aphek ^{1,2} Batash ¹³ Ekron ² Safi/Gath ^{2,4}	Aphek ^{1,2} Ashkelon ^{2,5} Ekron ² Safi/Gath ^{2,4}	Aphek ^{1,2}
<i>Calendula arvensis</i>	w/w	Beth Shean ¹⁴	-	-
<i>Calendula</i> sp.	w/w	Jericho ¹⁸	-	Beth Shean ⁷
<i>Capparis spinosa</i>	w/w	Beth Shean ¹⁴ Ta'anach ⁹	Aphek ^{1,2,5} Ashkelon ²	Ta'anach ⁹
<i>Carex divisa</i>	w/w	-	Ekron ²	-
<i>Carex hallerana</i>	w/w	-	Ekron ²	-
<i>Carthamus</i> sp.		-	Ashkelon ^{2,5}	-
<i>Catabrosa aquatica</i>	w/w	-	Ekron ²	-
<i>Celtis australis</i>	cult	-	-	Rehov ²²
<i>Centaurea crocodylium</i>	w/w	-	-	Shiloh ²⁰
<i>Centaurea iberica</i>	w/w	Aphek ^{1,2}	-	-
<i>Centaurea iberica/hyalolepis</i>	w/w	Batash ¹³	-	-
<i>Centaurea pallescens</i>	w/w	-	Ashkelon ² Ekron ²	-
<i>Centaurea procurrens</i>	w/w	-	Aphek ^{1,2}	-
<i>Centaurea procurrens/glomerata</i>	w/w	-	Aphek ²	-
<i>Centaurea verutum</i>	w/w	Batash ¹³	-	-
<i>Centaurea</i> sp.	w/w	Jericho ¹⁸	-	-
<i>Cephalaria joppensis</i>	w/w	Batash ¹³	Ashkelon ^{2,5}	Keisan ²³ Rosh Zayit ¹⁹
<i>Cephalaris joppensis/syriaca</i>	w/w	Ekron ²	Ekron ²	-
<i>Cephalaria syriaca</i>	w/w	Batash ¹³ Ifshar ^{15,16}	Aphek ^{1,2}	Afula ²⁴ Aphek ^{1,2} Beth Shean ²⁵ Keisan ²³ Shiloh ²⁰
<i>Cephalaria</i> sp.	w/w	-	Ashkelon ^{2,5} Safi/Gath ^{2,4}	-
<i>Ceratonia siliqua</i>	cult	-	Ashkelon ^{10,11,5}	-
<i>Chenopodium murale</i>	w/w	Aphek ^{1,2} Beth Shean ¹⁴ Ekron ²	Aphek ^{1,2} Ashkelon ^{2,10,11,5} Ekron ²	Rosh Zayit ¹⁹
<i>Chenopodium murale/vulvaria</i>	w/w	Aphek ¹	Aphek ^{1,2}	Aphek ²
<i>Chrozophora</i> sp.	w/w	Megiddo ⁸	Aphek ^{1,2} Ekron ²	-
<i>Chrysanthemum coronarium</i>	w/w	Aphek ^{1,2} Beth Shean ¹⁴	Aphek ^{1,2} Ashkelon ^{2,5} Ekron ² Safi/Gath ^{2,4}	Aphek ^{1,2}
<i>Cicer arietinum</i>	cult	Arad ²¹ Beth Shean ¹⁴ Ifshar ^{15,16} Jericho ¹⁸ Lachish ²⁶	Ashkelon ^{10,11,5}	Afula ²⁴ Lachish ²⁶
<i>Cicer pinnatifidum</i>	w/w	Afula ¹⁷	Ashkelon ^{2,5}	-
<i>Cichorium endivia</i>	w/w	-	Aphek ¹ Ekron ²	-
<i>Cichorium endivia</i> subsp. <i>divaricatum</i>	w/w	-	Aphek ²	-
<i>Cichorium pumilum</i>	w/w	-	Ashkelon ⁵	-

<i>Citrullus colocynthis</i>	w/w	-	-	Arad ²⁷
<i>Cladium mariscus</i>	w/w	-	Ashkelon ^{10, 11, 5}	-
<i>Conium maculatum</i>	w/w	Aphek ^{1, 2}	-	-
<i>Consolida incana</i>	w/w	-	-	Rosh Zayit ¹⁹
<i>Convolvulus arvensis</i>	w/w	Batash ¹³	-	Rosh Zayit ¹⁹
<i>Convolvulus oleifolius</i>	w/w	-	Aphek ^{1, 2}	-
<i>Convolvulus secundus</i>	w/w	-	Ashkelon ^{2, 5}	Aphek ^{1, 2}
<i>Convolvulus</i> sp.	w/w	Ekron ²	Ashkelon ²	-
<i>Coriandrum sativum</i>	w/w	-	Ashkelon ² Ekron ²	-
<i>Coronilla cretica</i>	w/w	-	-	Rosh Zayit ¹⁹
<i>Coronilla repanda</i>	w/w	Ekron ²	-	-
<i>Coronilla repanda/scorpioides</i>	w/w	-	-	Shiloh ²⁰
<i>Coronilla scorpioides</i>	w/w	Aphek ^{1, 2}	Aphek ^{1, 2} Ekron ²	Aphek ^{1, 2}
<i>Coronilla</i> sp.	w/w	Ekron ²	Ekron ² Safi/Gath ^{2, 4}	-
<i>Crataegus</i> sp.		Lachish ²⁶	-	-
<i>Crepis aspera</i>	w/w	-	-	Rosh Zayit ¹⁹
<i>Crucianella</i> sp.		-	Ashkelon ⁵	-
<i>Cuminum cyminum</i>	cult	-	Aphek ^{1, 2}	-
<i>Cutandia maritima</i>	w/w	-	Ashkelon ²	-
<i>Cynodon dactylon</i>	w/w	-	Ashkelon ⁵	Rosh Zayit ¹⁹
<i>Dactylis glomerata</i>	w/w	Aphek ^{1, 2} Ekron ²	-	-
<i>Daucus broteri</i>	w/w	Batash ¹³	Aphek ^{1, 2}	-
<i>Daucus carota</i> subsp. <i>maximus</i>	w/w	-	Ashkelon ^{2, 5} Aphek ^{1, 2}	-
<i>Echinochloa colonum</i>	w/w	-	Ashkelon ²	-
<i>Echiochilon fruticosum</i>	w/w	-	Ashkelon ^{2, 10, 11, 5}	-
<i>Echium angustifolium/judaeum</i>		Safi/Gath ^{2, 4}	Ashkelon ² Ekron ² Safi/Gath ^{2, 4}	-
<i>Echium judaeum</i>	w/w	Jericho ¹⁸ Megiddo ⁸ Ta'anach ⁹	Ashkelon ⁵	Ta'anach ⁹
<i>Eleocharis palustris</i>	w/w	-	Ashkelon ²	-
<i>Emex spinosa</i>	w/w	Aphek ^{1, 2}	Ashkelon ^{2, 5}	-
<i>Eragrostis barrelieri/pilosa</i>	w/w	-	Ashkelon ²	-
<i>Eragrostis pilosa</i>	w/w	-	Ekron ²	-
<i>Erodium botrys</i>	w/w	-	Ekron ²	-
<i>Erodium moschatum</i>	w/w	-	Ashkelon ² Aphek ^{1, 2}	-
<i>Erucaria hispanica</i>	w/w	Batash ¹³	-	-
<i>Erucaria microcarpa</i>	w/w	-	Ashkelon ^{10, 11, 5}	-
<i>Euphorbia helioscopia</i>	w/w	-	Aphek ^{1, 2} Qasile ²⁸	-
<i>Euphorbia peplus</i>	w/w	Aphek ^{1, 2}	-	-
<i>Euphorbia valerianifolia</i>	w/w	Batash ¹³	Ashkelon ²	-
<i>Euphorbia</i> sp.		-	Aphek ^{1, 5} Ashkelon ^{2, 5}	-

<i>Ficus carica</i>	cult	Aphek ^{1,2} Batash ¹³ Beth Shean ¹⁴ Ekron ² Ifshar ²⁹ Jericho ¹⁸ Megiddo ⁸ Safi/Gath ^{2,4} Shiloh ²⁰	Aphek ^{1,2} Ashkelon ^{2,10,11,5} Ekron ² Qasile ²⁸ Safi/Gath ^{2,4}	Aphek ^{1,2} Megiddo ⁸ Rosh Zayit ¹⁹ Shiloh ²⁰
<i>Ficus sycomorus</i>	cult	-	Ashkelon ^{10,11,5}	-
<i>Fumaria parviflora</i>	w/w	-	Ashkelon ⁵	Beth Shean ⁷
<i>Fumaria</i> (Sect. <i>Fumaria</i>)		Aphek ^{1,2} Jericho ¹⁸	Aphek ^{1,2} Ashkelon ²	Aphek ^{1,2}
<i>Galium aparine</i>	w/w	-	Ashkelon ^{2,5}	-
<i>Galium tricoratum</i>	w/w	Beth Shean ¹⁴ Manahat ³ Shiloh ²⁰	Ashkelon ⁵	Afula ²⁴ Beth Shean ⁷ Rosh Zayit ¹⁹ Shiloh ²⁰
<i>Galium</i> sp.		Aphek ² Batash ¹³ Ekron ² Ifshar ^{15,29,16} Jericho ¹⁸	Aphek ^{1,2} Ashkelon ² Ekron ²	Aphek ^{1,2} Ifshar ¹⁵
<i>Gastridium ventricosum</i>	w/w	-	Ekron ²	-
<i>Geranium</i> sp.		Ekron ²	-	-
<i>Geropogon hybridus</i>	w/w	Batash ¹³	-	-
<i>Glaucium corniculatum</i>	w/w	-	Ashkelon ²	-
<i>Gynandris sisyrrinchium</i>	w/w	-	Aphek ^{1,2} Ashkelon ⁵	Beth Shean ⁷
<i>Gypsophyla</i> sp.		Megiddo ⁸	-	Megiddo ⁸
<i>Helianthemum stipulatum</i>	w/w	-	Ashkelon ^{10,11,5}	-
<i>Heliotropium europaeum</i>	w/w	-	Aphek ^{1,2} Safi/Gath ^{2,4}	-
<i>Heliotropium</i> sp.		Aphek ^{1,2}	Ashkelon ² Ekron ²	Shiloh ²⁰
<i>Hippocrepis areolata/unisiliquosa</i>	w/w	-	Ashkelon ⁵	-
<i>Hippocrepis unisiliquosa</i>	w/w	-	Aphek ^{1,2}	-
<i>Hippocrepis</i> sp.		-	-	Shiloh ²⁰
<i>Hordeum bulbosum</i>	w/w	Aphek ^{1,2}	-	-
<i>Hordeum distichon</i>	cult	Arad ²¹ Ifshar ^{15,16} Jericho ¹⁸ Manahat ³ Shiloh ²⁰	Aphek ^{1,2} Ashkelon ^{10,11} Qasile ²⁸	Beth Shean ^{7,25} Ifshar ¹⁵ Rosh Zayit ¹⁹ Shiloh ²⁰
<i>Hordeum hexastichium</i>	cult	-	-	Beth Shean ⁷
<i>Hordeum glaucum</i>	w/w	Aphek ^{1,2}	Ashkelon ^{2,5} Ekron ² Safi/Gath ^{2,4}	Aphek ^{1,2} Beth Shean ⁷
<i>Hordeum marinum</i>	w/w	-	Ashkelon ^{2,5}	-
<i>Hordeum vulgare</i> s.l. (<i>Hordeum sativum</i> and <i>Hordeum vulgare</i>)	cult	Afula ¹⁷ Aphek ^{1,2} Arad ²¹ Batash ¹³ Beth Shean ¹⁴ Ekron ²	Aphek ^{1,2} Ashkelon ^{2,5} Ekron ² Qasile ²⁸ Safi/Gath ^{2,4}	Aphek ^{1,2} Beth Shean ²⁵ Keisan ²³ Megiddo ⁸ Ramat Matred ³¹ Rosh Zayit ¹⁹

		Ifshar ^{15, 29, 16} Jericho ¹⁸ Lachish ²⁶ Megiddo ⁸ Safi/Gath ^{2, 4} Shiqmim ⁶		Shiloh ²⁰
<i>Hordeum spontaneum</i>	w/w	-	Ashkelon ^{2, 5}	Rosh Zayit ¹⁹
<i>Hordeum</i> sp.	w/w	Afula ¹⁷ Ashdod ³² Ifshar ¹⁵ Jericho ¹⁸ Ta'anach ⁹	Ekron ²	Arad ²⁷ Be'er Sheba ²⁷ City of David ¹² Megiddo ⁸ Ramat Matred ³¹
<i>Hymenocarpus circinnatus</i>	w/w	Aphek ^{1, 2}	Aphek ^{1, 2} Ashkelon ⁵ Ekron ²	-
<i>Hyoscyamus albus</i>	w/w	-	Ashkelon ²	-
<i>Hyoscyamus aureus</i>	w/w	-	Ashkelon ²	-
<i>Hypericum triquetrifolium</i>	w/w	-	-	Rosh Zayit ¹⁹
<i>Juglans regia</i>	cult	-	-	City of David ¹²
<i>Juncus acutus</i>	w/w	-	Ashkelon ^{10, 11, 5}	-
<i>Kickxia spuria</i>	w/w	-	Ashkelon ²	-
<i>Knautia integrifolia</i>	w/w	Megiddo ⁸	-	Megiddo ⁸
<i>Lathyrus clymenum</i>	w/w	Nami ^{33, 34}	-	-
<i>Lathyrus hierosolymitanus</i>	w/w	-	Aphek ^{1, 2} Ekron ²	-
<i>Lathyrus marmoratus</i>	w/w	-	Ekron ²	-
<i>Lathyrus sativus</i>	cult	Ekron ² Lachish ²⁶	Ashkelon ^{2, 5}	-
<i>Lathyrus sativus/cicera</i>	cult	Batash ¹³	Ashkelon ³⁴ Ekron ³⁴ Qasile ^{28, 34}	-
<i>Lathyrus</i> (Sect. <i>Cicerula</i>)	cult	Ashdod ³² Batash ¹³ Ekron ²	Aphek ^{1, 2} Ashkelon ^{2, 5} Ekron ²	Aphek ^{1, 2} Shiloh ²⁰
<i>Lathyrus</i> sp.		Ekron ² Jericho ¹⁸ Shiloh ²⁰	Ashkelon ^{2, 10, 11, 5}	Rosh Zayit ¹⁹
<i>Laurus nobilis</i>	w/w	-	Ashkelon ^{10, 11, 5}	-
<i>Lavatera trimestris</i>	w/w	Batash ¹³	-	-
<i>Lens culinaris</i>	cult	Aphek ^{1, 2} Arad ²¹ Batash ¹³ Beth Shean ¹⁴ Ekron ² Ifshar ^{15, 16} Jericho ¹⁸ Lachish ²⁶ Manahat ³ Megiddo ⁸ Shiloh ²⁰ Safi/Gath ^{2, 4}	Aphek ^{1, 2, 11} Ashkelon ^{2, 10, 5} Ekron ² Qasile ²⁸ Safi/Gath ^{2, 4}	Aphek ^{1, 2} Beth Shean ⁷ Ifshar ¹⁵ Megiddo ⁸ Shiloh ²⁰
<i>Lens</i> sp.		Aphek ^{1, 2} Ifshar ²⁹ Jericho ¹⁸ Ta'anach ⁹	Ekron ²	Aphek ² City of David ¹²

<i>Leopoldia comosa</i>	w/w	-	-	Aphek ^{1,2}
<i>Linaria chalepensis</i>	w/w	-	Ashkelon ^{10,11,5}	-
<i>Linum bienne</i>	w/w	-	Ashkelon ^{2,5}	-
<i>Linum bienne/nodiflorum</i>	w/w	-	-	Beth Shean ²⁵
<i>Linum bienne/strictum</i>	w/w	-	Ekron ²	-
<i>Linum nodiflorum</i>	w/w	Batash ¹³	-	Rosh Zayit ¹⁹
<i>Linum pubescens</i>	w/w	Batash ¹³	-	-
<i>Linum usitatissimum</i>	cult	Aphek ^{1,2} Arad ²¹ Beth Shean ¹⁴ Jericho ¹⁸	Aphek ^{1,2} Ashkelon ^{2,5} Ekron ² Qasile ²⁸	Aphek ^{1,2} Beth Shean ²⁵ Shiloh ²⁰
<i>Linum</i> sp.		Aphek ² Beth Shean ¹⁴ Ekron ² Ifshar ^{15,29,16} Jericho ¹⁸	Aphek ^{1,2} Ashkelon ^{2,5} Ekron ²	Aphek ^{1,2} Ifshar ¹⁵
<i>Lolium rigidum</i>	w/w	Beth Shean ¹⁴	Ashkelon ^{2,5}	Rosh Zayit ¹⁹
<i>Lolium temulentum</i>	w/w	Aphek ^{1,2} Batash ¹³ Beth Shean ¹⁴ Ekron ² Ifshar ^{15,29,16} Lachish ²⁶ Megiddo ⁸ Shiloh ²⁰ Safi/Gath ^{2,4}	Aphek ^{1,2} Ashkelon ^{2,10,11,5} Ekron ² Qasile ²⁸ Safi/Gath ^{2,4}	Aphek ^{1,2} Beth Shean ^{7,25} Ifshar ¹⁵ Keisan ²³ Lachish ²⁶ Megiddo ⁸ Rosh Zayit ¹⁹ Shiloh ²⁰
<i>Lolium temulentum/rigidum</i>	w/w	-	-	Beth Shean ⁷
<i>Lolium</i> sp.		Arad ²¹ Beth Shean ¹⁴ Jericho ¹⁸ Manahat ³ Megiddo ⁸	-	Megiddo ⁸
<i>Lupinus</i> sp.		-	-	Rosh Zayit ¹⁹
<i>Lycium schweinfurthii</i>	w/w	-	Aphek ^{1,2}	-
<i>Lysimachia dubia</i>	w/w	-	Ashkelon ^{10,11,5}	-
<i>Malva nicaeensis</i>	w/w	-	Ashkelon ²	-
<i>Malva oxyloba/parviflora</i>	w/w	-	Ashkelon ⁵	-
<i>Malva parviflora</i>	w/w	Aphek ^{1,2} Beth Shean ¹⁴ Shiloh ²⁰ Shiqmim ⁶	Aphek ^{1,2} Ashkelon ^{2,5} Safi/Gath ^{2,4}	-
<i>Malva</i> sp.		Aphek ^{1,2} Arad ²¹ Beth Shean ¹⁴ Ekron ² Ifshar ^{15,29,16} Jericho ¹⁸ Safi/Gath ^{2,4}	Aphek ^{1,2} Ashkelon ^{2,5} Ekron ² Safi/Gath ^{2,4}	Aphek ^{1,2}
<i>Medicago doliata</i>	w/w	Ekron ²	-	-
<i>Medicago littoralis</i>	w/w	-	Aphek ^{1,2}	-
<i>Medicago minima</i>	w/w	Beth Shean ¹⁴ Megiddo ⁸	-	Megiddo ⁸
<i>Medicago orbicularis</i>	w/w	Ta'anach ⁹	-	-
<i>Medicago polymorpha</i>	w/w	-	Aphek ^{1,2}	-

<i>Medicago polymorpha/minima</i>		-	Aphek ^{1,2}	-
<i>Medicago scutellata</i>	w/w	Ta'anach ⁹	-	-
<i>Medicago tuberculata</i>	w/w	-	Ashkelon ⁵	Beth Shean ⁷
<i>Medicago</i> sp.		Aphek ^{1,2} Batash ¹³ Ekron ² Ifshar ^{15,16,29} Safi/Gath ^{2,4}	Aphek ^{1,2} Ashkelon ^{2,5} Ekron ² Safi/Gath ^{2,4}	Aphek ^{1,2}
<i>Melilotus</i> sp.		Megiddo ⁸	-	Megiddo ⁸
<i>Mercurialis annua</i>	w/w	Aphek ^{1,2}	Aphek ^{1,2} Ekron ²	Aphek ²
<i>Mesembryanthemum</i> sp.	w/w	-	Ashkelon ⁵	-
<i>Moltkiopsis ciliata</i>	w/w	-	Ashkelon ²	-
<i>Neslia apiculata</i>	w/w	-	-	Rosh Zayit ¹⁹ Shiloh ²⁰
<i>Ochthodium aegyptiacum</i>	w/w	Aphek ^{1,2} Ekron ²	Ashkelon ^{2,5}	Aphek ² Shiloh ²⁰
<i>Olea europaea</i>	cult	Aphek ^{1,2} Arad ²¹ Batash ¹³ Beth Shean ¹⁴ Ekron ² Lachish ²⁶ Manahat ³ Megiddo ⁸ Safi/Gath ^{2,4} Shiloh ²⁰ Ta'anach ⁹ Tel Dalit ³⁵	Aphek ^{1,2} Ashkelon ^{2,10,11,5} Batash ¹³ Ekron ² Safi/Gath ^{2,4}	Afula ²⁴ Aphek ^{1,2} Arad ²⁷ Batash ¹³ Be'er Sheba ²⁷ Beth Shean ⁷ City of David ¹² Kedesh ³⁶ Lachish ²⁶ Megiddo ⁸ Shiloh ²⁰ Ta'anach ⁹
<i>Onobrychis caput-galli</i>	w/w	Shiloh ²⁰	Ashkelon ⁵	-
<i>Onobrychis</i> sp.		-	Ashkelon ²	-
<i>Ononis ornithopodioides/viscosa</i>	w/w	Shiloh ²⁰	-	-
<i>Ononis serrata</i>	w/w	Beth Shean ¹⁴	-	-
<i>Ononis viscosa ssp. sicula</i>	w/w	-	Aphek ^{1,2}	-
<i>Ononis</i> sp.		Aphek ^{1,2} Ifshar ^{15,16}	Aphek ^{1,2}	-
<i>Onopordum</i> sp.	w/w	-	Ashkelon ⁵	-
<i>Onosma gigantea</i>	w/w	-	Aphek ^{1,2} Ashkelon ² Ekron ²	-
<i>Oryzopsis miliacea</i>	w/w	-	-	Shiloh ²⁰
<i>Panicum</i> sp.		-	Ekron ²	-
<i>Papaver somniferum</i>	cult	-	Ashkelon ²	-
<i>Papaver</i> sp.	w/w	Jericho ¹⁸	-	-
<i>Paronychia</i> sp.		Beth Shean ¹⁴	-	-
<i>Phalaris paradoxa</i>	w/w	Aphek ¹ Batash ¹³ Beth Shean ¹⁴ Ekron ² Ifshar ^{15,29,16} Megiddo ⁸ Shiloh ²⁰	Aphek ^{1,2} Ashkelon ^{10,11,5}	Ifshar ¹⁵ Keisan ²³ Megiddo ⁸ Rosh Zayit ¹⁹ Shiloh ²⁰
<i>Phalaris paradoxa/minor</i>	w/w	Afula ¹⁷ Beth Shean ¹⁴	-	Beth Shean ⁷

<i>Phalaris</i> sp.		Aphek ^{1,2} Ekron ² Safi/Gath ^{2,4}	Aphek ^{1,2} Ashkelon ² Ekron ² Safi/Gath ^{2,4}	Aphek ^{1,2}
<i>Phleum exaratum/subulatum</i>	w/w	-	Safi/Gath ²	-
<i>Phleum subulatum</i> and <i>Phleum</i> sp.	w/w	-	Aphek ^{1,2} Ashkelon ^{2,5}	-
<i>Phoenix dactylifera</i>	cult	Jericho ¹⁸	-	Arad ²⁷ Be'er Sheba ²⁷ City of David ¹² Ramat Matred ³¹
<i>Picris altissima</i>	w/w	Batash ¹³ Beth Shean ¹⁴	-	Rosh Zayit ¹⁹
<i>Picris amalecitana</i>	w/w	-	Ashkelon ²	-
<i>Picris galilaea</i>	w/w	Batash ¹³	Ashkelon ^{2, 10, 11, 5}	-
<i>Piptatherum holciforme</i>	w/w	-	Ashkelon ^{2,5}	-
<i>Piptatherum</i> sp.		-	Aphek ^{1,2}	-
<i>Pistacia atlantica</i>	w/w	Arad ²¹ Batash ¹³ Beth Shean ¹⁴ Jericho ¹⁸ Lachish ²⁶ Manahat ³	Aphek ^{1,2} Ekron ²	-
<i>Pistacia atlantica/palaestina</i>	w/w	-	Ekron ²	-
<i>Pistacia palaestina</i>	w/w	Ekron ² Manahat ³ Shiloh ²⁰	-	Shiloh ²⁰
<i>Pisum elatius</i>	w/w	-	Aphek ^{1,2}	-
<i>Pisum fulvum</i>	w/w	-	Safi/Gath ^{2,4}	-
<i>Pisum sativum</i>	cult	Arad ²¹ Jericho ¹⁸	-	-
<i>Pisum</i> sp.		Ta'anach ⁹	-	-
<i>Plantago lagopus</i>	w/w	-	Ashkelon ²	-
<i>Plantago notata</i>	w/w	-	Ashkelon ⁵	-
<i>Plantago ovata</i>	w/w	-	Ekron ²	-
<i>Plantago</i> sp.		Aphek ^{1,2} Ekron ² Jericho ¹⁸ Shiqmim ⁶	Ashkelon ^{2,5}	Aphek ²
<i>Poa bulbosa</i>	w/w	-	Ashkelon ⁵	-
<i>Poa</i> sp.		-	Ashkelon ^{2,5}	-
<i>Polygonum arenastrum</i>	w/w	Aphek ^{1,2}	Ashkelon ⁵	-
<i>Polygonum</i> sp.		Megiddo ⁸	-	Megiddo ⁸
<i>Portulaca oleracea</i>	w/w	-	Ashkelon ^{2,5}	-
<i>Prosopis farcta</i>	w/w	Beth Shean ¹⁴	-	-
<i>Prunus armeniaca</i>	cult	-	-	City of David ¹²
<i>Prunus persica</i>	cult	-	-	City of David ¹²
<i>Prunus</i> sp.		-	Qasile ²⁸	-
<i>Punica granatum</i>	cult	Arad ²¹ Batash ¹³ Beth Shean ¹⁴ Ekron ² Ifshar ¹⁵	Ashkelon ^{10, 11} Aphek ^{1,2} Ekron ² Safi/Gath ^{2,4}	City of David ¹²

		Jericho ¹⁸ Shiloh ²⁰		
<i>Quercus</i> sp.		Arad ²¹ Ifshar ^{15, 16} Manahat ³	Ashkelon ^{10, 11, 5}	-
<i>Ranunculus arvensis</i>	w/w	Aphek ^{1, 2}	Aphek ^{1, 2, 5}	-
<i>Ranunculus marginatus</i>	w/w	Batash ¹³	-	-
<i>Ranunculus marginatus</i> var. <i>scandicinus</i>	w/w	Aphek ^{1, 2} Ekron ²	-	Aphek ^{1, 2}
<i>Raphanus raphanistrum</i>	w/w	-	Ashkelon ^{2, 5}	-
<i>Rapistrum rugosum</i>	w/w	Aphek ^{1, 2} Ekron ²	Aphek ^{1, 2} Ashkelon ⁵ Ekron ² Safi/Gath ^{2, 4}	Shiloh ²⁰
<i>Reboudia pinnata</i>	w/w	-	Ashkelon ^{2, 5}	-
<i>Reseda orientalis</i>	w/w	-	Ashkelon ²	-
<i>Reseda</i> sp.		Aphek ^{1, 2}	-	-
<i>Retama raetam</i>	w/w	-	Ashkelon ⁵	-
<i>Rhagadiolus stellatus</i>	w/w	Batash ¹³	-	-
<i>Ridolfia segetum</i>	w/w	-	-	Rosh Zayit ¹⁹
<i>Rubus sanguineus</i>	w/w	Shiloh ²⁰	-	-
<i>Rumex conglomeratus</i>	w/w	Beth Shean ¹⁴	-	-
<i>Rumex pulcher</i>	w/w	Aphek ^{1, 2} Batash ¹³ Ekron ² Megiddo ⁸	Aphek ^{1, 2} Ashkelon ^{2, 5} Ekron ²	Aphek ^{1, 2} Megiddo ⁸ Rosh Zayit ¹⁹ Shiloh ²⁰
<i>Salsola kali</i>	w/w	-	Ashkelon ²	-
<i>Schoenus nigricans</i>	w/w	-	Aphek ^{1, 2} Ashkelon ^{2, 10, 11, 5} Ekron ² Safi/Gath ^{2, 4}	-
<i>Scirpus holoschoenus</i>	w/w	Beth Shean ¹⁴	-	-
<i>Scirpus lacustris</i>	w/w	-	Aphek ^{1, 2}	-
<i>Scirpus litoralis</i>	w/w	Aphek ^{1, 2}	Aphek ^{1, 2} Ashkelon ² Ekron ²	-
<i>Scirpus maritimus</i>	w/w	Aphek ^{1, 2} Beth Shean ¹⁴	Aphek ^{1, 2}	Aphek ²
<i>Scirpus maritimus/lacustris</i>	w/w	Aphek ^{1, 2}	Aphek ^{1, 2} Ashkelon ² Ekron ²	-
<i>Scorpiurus muricatus</i>	w/w	Aphek ^{1, 2} Ashdod ³² Batash ¹³ Beth Shean ¹⁴ Ekron ² Lachish ²⁶ Safi/Gath ^{2, 4} Shiloh ²⁰	Aphek ^{1, 2} Ashkelon ^{2, 5} Ekron ² Qasile ²⁸ Safi/Gath ^{2, 4}	Aphek ^{1, 2} Beth Shean ⁷
<i>Scorpiurus</i> sp.		Megiddo ⁸	-	-
<i>Securigera securidaca</i>	w/w	-	Aphek ^{1, 2} Ashkelon ²	Rosh Zayit ¹⁹
<i>Sherardia arvensis</i>	w/w	-	Ashkelon ⁵	-
<i>Silene nocturna</i>	w/w	-	Ashkelon ⁵	-

<i>Silene</i> sp.		Ifshar ^{15, 29, 16}	Ashkelon ^{2, 5} Ekron ²	Ifshar ¹⁶
<i>Silybum marianum</i>	w/w	Ashdod ³²	-	-
<i>Sinapis</i> sp.	w/w	Arad ²¹	-	-
<i>Sisylax arenaria</i>	w/w	-	Ashkelon ^{2, 5}	-
<i>Solanum nigrum/villosum</i>	w/w	Beth Shean ¹⁴	Ashkelon ²	-
<i>Solanum villosum</i>	w/w	Aphek ^{1, 2}	-	Aphek ²
<i>Spergula arvensis</i>	w/w	Aphek ^{1, 2}	Ashkelon ⁵	-
<i>Spergula fallax</i>	w/w	-	Ashkelon ^{2, 5}	-
<i>Stipa arabica</i>	w/w	Beth Shean ¹⁴	-	-
<i>Stipa bromoides</i>	w/w	-	Ashkelon ⁵	-
<i>Styrax officinalis</i>	w/w	Manahat ³	-	-
<i>Suaeda</i> sp.	w/w	Beth Shean ¹⁴	-	-
<i>Tetragonolobus palaestinus</i>	w/w	Ta'anach ⁹	-	-
<i>Teucrium capitatum</i>	w/w	-	Ashkelon ⁵	-
<i>Thesium humile</i>	w/w	-	Ashkelon ⁵	-
<i>Thymelaea hirsuta</i>	w/w	Aphek ^{1, 2}	Aphek ^{1, 2} Ashkelon ^{2, 5} Ekron ²	Aphek ²
<i>Thymelaea passerina</i>	w/w	Batash ¹³ Beth Shean ¹⁴ Ekron ² Megiddo ⁸ Safi/Gath ^{2, 4}	Aphek ^{1, 2} Ashkelon ^{2, 5} Ekron ² Safi/Gath ^{2, 4}	Beth Shean ⁷ Megiddo ⁸ Rosh Zayit ¹⁹ Shiloh ²⁰
<i>Torilis</i> sp.		Ekron ²	-	Rosh Zayit ¹⁹
<i>Trifolium arvense</i>	w/w	Beth Shean ¹⁴	-	-
<i>Trifolium berytheum</i>	w/w	Batash ¹³	-	-
<i>Trifolium clusii</i>	w/w	-	Aphek ^{1, 2}	-
<i>Trifolium spumosum</i>	w/w	-	Aphek ^{1, 2}	-
<i>Trifolium</i> sp.		Megiddo ⁸	Aphek ^{1, 2}	Beth Shean ⁷ Megiddo ⁸ Rosh Zayit ¹⁹
<i>Trigonella arabica</i>	w/w	Shiqmim ⁶	-	-
<i>Trigonella foenum-graecum</i>	w/w	Batash ¹³ Ekron ²	Ashkelon ⁵	Lachish ²⁶
<i>Trigonella foenum-graecum/berlythea</i>	w/w	-	Aphek ^{1, 2}	-
<i>Trigonella hierosolymitana</i>	w/w	-	Aphek ^{1, 2}	-
<i>Trigonella</i> sp.	w/w	Aphek ^{1, 2} Batash ¹³	Aphek ^{1, 2}	-
<i>Triticum/Aegilops</i>		Ashdod ³²	-	-
<i>Triticum aestivum</i>	cult	Arad ²¹ Jericho ¹⁸ Megiddo ⁸	-	Megiddo ⁸
<i>Triticum compactum</i>	cult	-	-	Lachish ²⁶
<i>Triticum dicoccum/monococcum</i>	cult	Jericho ¹⁸	-	-
<i>Triticum durum</i> subsp. <i>horanicum</i>	cult	-	-	Keisan ²³
<i>Triticum monococcum</i> subsp. <i>monococcum</i>	cult	Arad ²¹ Jericho ³⁷	-	Lachish ²⁶
<i>Triticum turgidum</i> subsp. <i>dicoccoides</i>	w/w	Arad ²¹ Jericho ¹⁸	-	-
<i>Triticum turgidum</i> subsp. <i>dicoccum</i>	cult	Afula ¹⁷ Aphek ^{1, 2}	Aphek ^{1, 2} Ashkelon ^{2, 10, 11, 5}	Aphek ^{1, 2} Beth Shean ⁷

		Arad ²¹ Batash ¹³ Beth Shean ¹⁴ Ekron ² Ifshar ^{15, 29, 16} Jericho ¹⁸ Lachish ²⁶ Megiddo ⁸ Safi/Gath ^{2, 4} Shiqmim ⁶	Ekron ² Qasile ²⁸ Safi/Gath ^{2, 4}	Ifshar ¹⁵ Keisan ²³ Lachish ²⁶ Megiddo ⁸ Rosh Zayit ¹⁹
<i>Triticum turgidum</i> subsp. <i>dicoccum/parvicoccum</i>	cult	Batash ¹³	-	-
<i>Triticum turgidum</i> subsp. <i>parvicoccum</i>	cult	Afula ¹⁷ Aphek ^{1, 2} Batash ¹³ Beth Shean ¹⁴ Ekron ² Ifshar ^{15, 29, 16} Manahat ³ Safi/Gath ^{2, 4} Shiloh ²⁰	Aphek ^{1, 2} Ashkelon ^{2, 10, 11, 5} Ekron ² Safi/Gath ^{2, 4}	Aphek ^{1, 2} Beth Shean ^{7, 25} Ifshar ¹⁵ Rosh Zayit ¹⁹ Shiloh ²⁰
<i>Triticum</i> sp.		Beth Shean ¹⁴ Ta'anach ⁹	-	Arad ²⁷ Be'er Sheba ²⁷ City of David ¹² Megiddo ⁸ Ta'anach ⁹
<i>Vaccaria hispanica</i>	w/w	Batash ¹³	-	Shiloh ²⁰
<i>Valerianella muricata</i>	w/w	Beth Shean ¹⁴	Ashkelon ²	Beth Shean ⁷
<i>Verbena officinalis</i>	w/w	Megiddo ⁸	-	Megiddo ⁸
<i>Veronica</i> sp.	w/w	Jericho ¹⁸	-	-
<i>Vicia ervilia</i>	w/w	Aphek ^{1, 2} Ashdod ³² Batash ¹³ Ekron ² Ifshar ^{15, 29, 16} Jericho ¹⁸ Manahat ³ Megiddo ⁸ Shiloh ²⁰	Aphek ^{1, 2} Ashkelon ^{2, 10, 11, 5} Ekron ² Safi/Gath ^{2, 4}	Afula ²⁴ Aphek ^{1, 2} Ifshar ¹⁵ Keisan ²³ Megiddo ⁸ Shiloh ²⁰
<i>Vicia faba</i>	cult	Aphek ^{1, 2} Ashdod ³² Batash ¹³ Ekron ² Ifshar ¹⁵ Megiddo ⁸ Safi/Gath ^{2, 4}	Aphek ^{1, 2} Ekron ² Qasile ²⁸ Safi/Gath ^{2, 4}	Afula ²⁴ Aphek ^{1, 2} Ifshar ^{15, 29} Lachish ²⁶ Megiddo ⁸ Rosh Zayit ¹⁹ Shiloh ²⁰
<i>Vicia galilaea</i>	w/w	Shiloh ²⁰	-	-
<i>Vicia narbonensis</i>	w/w	-	-	Rosh Zayit ¹⁹
<i>Vicia narbonensis/Pisum</i>	w/w	Batash ¹³	Qasile ²⁸	-
<i>Vicia palaestina</i>	w/w	Ifshar ^{15, 16}	-	Ifshar ¹⁶
<i>Vicia sativa</i>	cult	Jericho ¹⁸	-	-
<i>Vicia</i> sp.		Aphek ² Arad ²¹ Ekron ² Jericho ¹⁸ Lachish ²⁶ Ta'anach ⁹	Aphek ² Ashkelon ^{2, 5} Ekron ²	Aphek ² City of David ¹² Lachish ²⁶

<i>Vigna luteola</i>	w/w	-	Ashkelon ^{2, 34, 5}	-
<i>Vitex agnus-castus</i> and <i>Vitex</i> sp.	w/w	Aphek ^{1, 2} Ekron ²	Aphek ^{1, 2} Ashkelon ^{2, 5} Ekron ²	Aphek ^{1, 2}
<i>Vitis vinifera</i>	cult	Aphek ^{1, 2} Arad ²¹ Ashdod ³² Batash ¹³ Beth Shean ¹⁴ Ekron ² Ifshar ²⁹ Jericho ¹⁸ Lachish ²⁶ Manahat ³ Megiddo ⁸ Safi/Gath ^{2, 4} Shiloh ²⁰ Ta'anach ⁹	Aphek ^{1, 2} Ashkelon ^{2, 10, 11, 5} Ekron ² Qasile ²⁸ Safi/Gath ^{2, 4}	Aphek ^{1, 2} City of David ¹² Lachish ²⁶ Megiddo ⁸ Rosh Zayit ¹⁹ Shiloh ²⁰
<i>Total for BA FL: NN of taxa =</i>	178			
<i> NN of species (%) =</i>	115 (65%)			
<i> NN of cult. =</i>	22 (12%)			
<i> NN of w/w =</i>	121 (68%)			
<i>Total for IA FL: NN of taxa =</i>	271			
<i> NN of species =</i>	190 (70%)			
<i> NN of cult. =</i>	29 (11%)			
<i> NN of w/w =</i>	202 (75%)			

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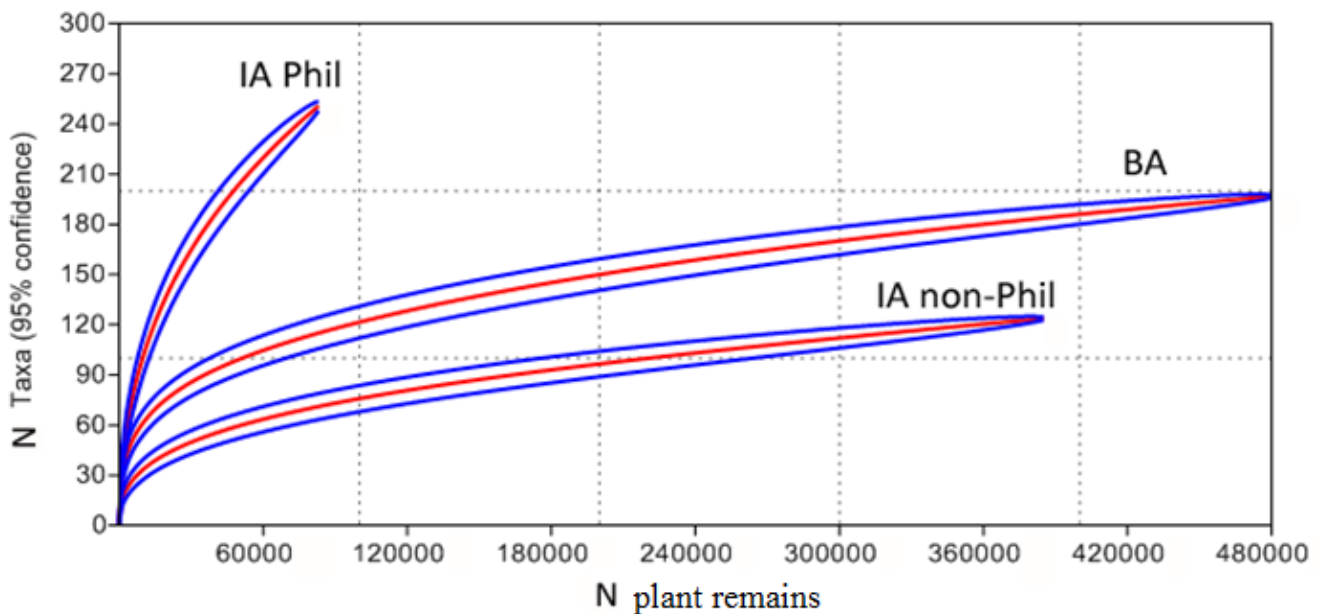
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SI 3 Evaluation of Possible Link Between Species Ubiquity and Sample Size

The data base for archaeobotanical samples of seeds and fruits from the Bronze Age, Philistine Iron Age Strata, and non-Philistine Iron Age strata examined in this study comprises identifications of 447 plant taxa determined to the species level and below.

To resolve the problem of possible link between sample size and species richness, we ran a Rarefaction test on the plant data base using the PAST statistical package (Hammer et al. 2001). As noted by Magurran (1991), Rarefaction addresses the issue of unequal sample sizes by calculating the numbers of species expected in each sample as if all samples were the same size. This test assumes that the sampled objects are randomly distributed in an environment, they are taxonomically similar and that sampling was carried out in the same manner.

Figure SI 3. Graph showing rarefaction curves for plant remain counts (X axis) by FL against numbers of plant taxa (Y axis).



The red line (Fig. SI 3) represents the calculated rarefaction curve for each period, which is a plot of the number of species as a function of the number of specimens (seeds and fruit), while the blue lines represent the 95% confidence limits calculated for each.

The rarefaction curves initially follow a steep slope as the most common species are found. Thereafter they flatten out to form a plateau as the most common species have been sampled and only the rarest species remain to be sampled. As illustrated in the graph, the curves for the Bronze Age and Iron Age non-Philistine FL follow such a pattern. They both flatten out to the right indicating that a reasonable number of individual samples have been examined and that more intensive sampling will yield only few additional species. Moreover, the difference in taxon number between these two samples, indicates that unrelated to sample size, fewer taxa are found in the non-Philistine Iron Age sample.

In contrast, the Iron Age Philistine FL on the left follows a different trajectory, with a steep slope on the left that does not flatten out to the right. This indicates that a large portion of the species diversity still remains to be discovered. While taxon diversity is beginning to flatten out at ca. 60,000 specimens for the two other periods, the curve is still rising for the Iron Age Philistine sample so that it lies far above that for both the Bronze Age and non-Philistine Iron Age FLs.

Clearly, the Iron Age Philistine assemblage contains a significantly higher number of species that will increase further, given a larger sample size. One can extrapolate the trajectory of this curve by extending the line, such that when a sample size of 180,000 specimens is attained, taxon number would reach ca. 300. These results demonstrate that the higher plant diversity in the Iron Age Philistine assemblages is not an artifact of sample size but a true reflection of the composition of the floral assemblage.

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