

Chakkour S et al. Plant diversity in traditional agroecosystems of North Morocco. Vegetation Classification and Survey. DOI: 10.3897/VCS.86024

Supplementary material 3. List of segetal species in the traditional agroecosystems of the Rif Mountains (Morocco). **Bou Ahmed** (BA). **Bellota** (BE). **Boujediane** (BJ). **Jnan Annich** (JN). **Tafza** (TZ). **Tanakoub** (TA). **Absolute frequency** (Fa). **Relative frequency** (Fr). **Life forms** (LF) **are:** Th: Therophyte, G: Geophyte, Hem: Hemicryptophyte, Ch: Chamaephyte. **Chorotypes** (CT) **are:** **Regional:** Ibero-Maghrebian (B). **Extended:** North-Africa (A); West-Mediterranean (C); West-Mediterranean, Macaronesian (F). **Mediterranean broad-ranging:** Mediterranean (D); West-Mediterranean and Europe (G); South-Mediterranean - Saharo-arabic (H); Mediterranean - Saharo–Arabic (I); Mediterranean - Macaronesian (J); Mediterranean - Irano-Turanian (K); Mediterranean - West-Asia (L); Mediterranean - Europe (M); Mediterranean – Eurasia (N); Mediterranean – Atlantic (O); Mediterranean - West-Asia - Europe (R); Mediterranean – Macaronesian - Irano-Turanian (S); Mediterranean – Macaronesian – Atlantic (T); Mediterranean – Atlantic – Paleotropical (U); Mediterranean – Macaronesian – Europe (V); Mediterranean – Macaronesian – Eurasia (W); Mediterranean – Macaronesian – Eurosiberian (X); Mediterranean - West-Asia – Neotropical (Y); Mediterranean – Macaronesian - Irano–Turanian - Europe (AA); Mediterranean – Macaronesian - West and Center Asia (AB); Mediterranean – Macaronesian - West-Asia – Europe (AC). **Palaearctic:** North-Africa – Eurasian – Macaronesian (Z); Eurasian (E); Eurasian - North-Africa (P); Europe - North-Africa (Q). **Global:** Subcosmopolite (AD); Cosmopolite (AE); Paleotemperate (AF); Holarctic (AG); Neotropical (AH); North America (AI); South-Africa (AJ). **Weed types** (WT) **are:** Agrestal (Ag); Apophyte (Ap); Ruderal (Rd). **Habitat types** (HT) **are:** Agricultural Habitat (AgH); Sparsely vegetated natural habitat (NHO); Natural habitat, well vegetated (NHC); Ruderal (Rud).

Species	Family	LF	CT	FS	HT	Fa. BA	Fa. BE	Fa. BJ	Fa. JN	Fa. TN	Fa. TA	Fa	Fr
<i>Adonis aestivalis</i> L.	Ranunculaceae	Th	R**	Ag	AgH	4	0	5	0	1	4	14	14.9
<i>Allium nigrum</i> L.	Alliaceae	G	C	Ag	AgH, NHO	3	3	6	7	3	5	27	28.7
<i>Alyssum simplex</i> Rudolphi	Brassicaceae	Th	K	Rd	AgH, NHO	6	0	0	0	0	0	6	6.4
<i>Amaranthus blitoides</i> S. Watson	Amaranthaceae	Th	AI	Rd	R	0	0	0	0	1	0	1	1.1
<i>Amaranthus retroflexus</i> L.	Amaranthaceae	Th	AD	Rd	R	0	1	2	2	1	0	6	6.4
<i>Ammi majus</i> L.	Apiaceae	Th	D	Ag	AgH, NHO	7	4	0	0	0	0	11	10.7
<i>Ammi visnaga</i> (L.) Lam.	Apiaceae	Th	D	Ag	AgH, NHO	0	0	0	5	4	0	9	9.6
<i>Anacyclus clavatus</i> (Desf.) Pers.	Asteraceae	Th	D	Ag	AgH, NHO	2	0	2	0	0	0	4	4.3
<i>Anacyclus radiatus</i> Loisel.	Asteraceae	Th	D	Rd	NHO, R	18	0	1	0	0	0	19	20.2
<i>Anagallis arvensis</i> L.	Primulaceae	Th	AG	Ag	AgH, NHO	16	2	14	13	6	12	63	67
<i>Anchusa azurea</i> Mill.	Boraginaceae	Hem	E	Rd	AgH, NHO, R	7	5	0	5	7	1	25	26.6
<i>Andryala integrifolia</i> L.	Asteraceae	Th, Hem	D	Rd	NHC, NHO, R	3	1	7	0	1	7	19	20.2
<i>Anisantha madritensis</i> (L.) Nevski	Poaceae	Th	J	Ag	NHC, NHO	16	3	6	14	5	6	50	53.2
<i>Anisantha rigida</i> (Roth) Hylander	Poaceae	Th	J	Rd	NHC, NHO, R	0	0	0	0	1	0	1	1.1
<i>Anisantha rubens</i> (L.) Nevski	Poaceae	Th	J	Ag	AgH, NHO	5	0	0	5	0	0	10	10.6
<i>Anisantha sterilis</i> (L.) Nevski	Poaceae	Th	J	Ag	AgH, NHC, NHO	3	0	0	0	0	0	3	3.2
<i>Anthyllis cornicina</i> L.	Fabaceae	Th	C	Ap	NHO	0	0	3	0	0	0	3	3.2
<i>Arenaria leptoclados</i> (Reichenb.) Guss.	Caryophyllaceae	Th	D	Ap	AgH, NHC, NHO	0	0	8	0	0	0	8	8.5
<i>Arisarum vulgare</i> subsp. <i>simorrhinum</i> (Durieu) Maire & Weiller	Araceae	G	D	Rd	R	0	2	0	1	2	2	7	7.4
<i>Aristida adscensionis</i> L.	Poaceae	Th, Hem	H	Ap	NHO	1	0	0	0	0	0	1	1.1
<i>Aristolochia paucinervis</i> Pomel	Aristolochiaceae	G	F	Ap	NHO, NHC, AgH	0	2	1	1	5	0	9	9.6
<i>Asperula hirsuta</i> Desf.	Rubiaceae	Ch, Hem	B	Ap	NHO	0	2	0	0	0	0	2	2.1
<i>Astragalus boeticus</i> L.	Fabaceae	Th	S	Ap	NHO	0	0	0	2	0	0	2	2.1
<i>Astragalus pelecinus</i> (L.) Barneby	Fabaceae	Th	J	Ap	NHO	3	0	0	0	0	0	3	3.2
<i>Avena sativa</i> L.	Poaceae	Th	AE	Ag	AgH	1	0	0	0	0	0	1	1.1
<i>Avena sterilis</i> L.	Poaceae	Th	AD	Ag	AgH, NHO	11	4	12	2	4	9	42	44.7

<i>Bellis sylvestris</i> Cirillo	Asteraceae	Hem	D	Ap	NHC	0	0	0	7	0	0	7	7.4
<i>Beta macrocarpa</i> Guss.	Chenopodiaceae	Th	J	Rd	R, NHO	1	0	0	2	2	0	5	5.3
<i>Beta vulgaris</i> subsp. <i>maritima</i> (L.) Arcang.	Chenopodiaceae	Th, Hem	J	Ap	NHO	5	0	2	6	0	0	13	13.8
<i>Bifora testiculata</i> (L.) Spreng.	Apiaceae	Th	Y	Ag	AgH	0	0	2	0	0	0	2	2.1
<i>Biscutella auriculata</i> L.	Brassicaceae	Hem	C	Ag	AgH	6	3	6	0	0	7	22	23.4
<i>Blackstonia perfoliata</i> (L.) Hudson	Gentianaceae	Th	AG	Ap	NHO	0	3	0	0	0	0	3	3.2
<i>Borago officinalis</i> L.	Boraginaceae	Th	J	Rd	R	2	0	0	5	0	2	9	9.6
<i>Brassica barrelieri</i> (L.) Janka	Brassicaceae	Th	B	Ap	NHO	0	8	0	0	0	0	8	8.5
<i>Briza maxima</i> L.	Poaceae	Th	D	Ag	AgH, NHO	0	0	0	0	1	0	1	1.1
<i>Bromus hordeaceus</i> L.	Poaceae	Th	X	Ag	AgH, NHC, NHO	1	0	0	0	0	0	1	1.1
<i>Bromus lanceolatus</i> Roth	Poaceae	Th	J	Ag	AgH, NHO	0	0	1	0	0	0	1	1.1
<i>Bupleurum lancifolium</i> Hornem.	Apiaceae	Th	D	Ag	AgH	0	0	0	1	0	0	1	1.1
<i>Calendula arvensis</i> (Vaill.) L.	Asteraceae	Th	D	Rd	R	1	6	0	8	0	0	15	16
<i>Calendula stellata</i> Cav.	Asteraceae	Th	D	Rd	R	0	0	0	1	0	0	1	1.1
<i>Capsella bursa-pastoris</i> (L.) Medik.	Brassicaceae	Th, Hem	AE	Rd	R	6	4	5	0	4	0	19	20.2
<i>Carduus pycnocephalus</i> L.	Asteraceae	Th	G	Rd	R, NHO	6	0	0	13	1	0	20	21.3
<i>Carex pendula</i> Hudson*	Cyperaceae	Hem	AF	Ap	NHO	0	0	0	1	0	0	1	1.1
<i>Centaurea calcitrapa</i> L.	Asteraceae	Th, Hem	M	Ap	NHO, R	1	0	0	0	6	5	12	12.8
<i>Centaurea melitensis</i> L.	Asteraceae	Th	D	Ap	NHO, Agh	1	0	0	3	0	0	4	4.3
<i>Centaurea pullata</i> L.	Asteraceae	Th, Hem	B	Ap	NHO	0	2	0	0	0	2	4	4.3
<i>Cerastium brachypetalum</i> Pers.	Caryophyllaceae	Th	Q	Ap	NHC, NHO	0	0	0	0	0	3	3	3.2
<i>Chamaemelum fuscatum</i> (Brot.) Vasc.	Asteraceae	Th	C	Ap	NHO	0	0	0	0	0	5	5	5.3
<i>Chamaerops humilis</i> L.	Arecaceae	Phan	C	Ap	NHC, NHO	0	0	0	2	0	0	2	2.1
<i>Chenopodium murale</i> (L.) S.Fuentes, Uotila & Borsch	Chenopodiaceae	Th	AE	Rd	R, AgH	8	0	0	6	1	0	15	16
<i>Chenopodium album</i> L.	Chenopodiaceae	Th	AD	Ag	AgH, R	0	0	4	4	2	1	11	11.7
<i>Cichorium intybus</i> L.	Asteraceae	Hem	R	Ag	AgH, R, NHO	0	0	0	8	1	2	11	11.7
<i>Cistus salviifolius</i> L.*	Cistaceae	Ch, Ph	D	Ap	NHC	0	0	0	2	0	0	2	2.1
<i>Cladanthus arabicus</i> (L.) Cass.	Asteraceae	Th	B	Ag	AgH, NHO	4	0	0	2	0	0	6	6.4
<i>Convolvulus althaeoides</i> L.	Convolvulaceae	Hem	J	Ag	AgH, NHO, NHC	11	3	11	2	5	11	43	45.7

<i>Convolvulus arvensis</i> L.	Convolvulaceae	G, Hem	AD	Ag	AgH, NHO, R	2	5	9	6	2	8	32	34
<i>Convolvulus tricolor</i> L.	Convolvulaceae	Th, Hem	J	Ag	NHO	0	0	0	0	1	4	5	5.3
<i>Coronilla scorpioides</i> (L.) Koch	Fabaceae	Th	J	Ag	AgH, NHO	0	1	0	0	0	1	2	2.1
<i>Crataegus monogyna</i> Jacquin*	Rosaceae	Phan	M	Ap	NHC	0	0	0	2	0	0	2	2.1
<i>Cynara cardunculus</i> L.*	Asteraceae	Hem, G	D	Ap	NHO	0	0	0	3	0	0	3	3.2
<i>Cynodon dactylon</i> (L.) Pers.	Poaceae	G, Hem	AE	Rd	R, AgH, NHO	4	0	8	3	4	1	20	21.3
<i>Dactylis glomerata</i> L.*	Poaceae	Th, Hem	D	Ap	NHC, NHO	4	0	0	1	0	0	5	5.3
<i>Datura stramonium</i> L.	Solanaceae	Th	AH	Rd	R, AgH	0	0	0	1	0	0	1	1.1
<i>Diplotaxis catholica</i> (L.) DC.	Brassicaceae	Th	B	Ag	AgH, NHO	4	0	0	0	0	0	4	4.3
<i>Dittrichia viscosa</i> (L.) Greuter	Asteraceae	Ch	D	Rd	R	16	2	2	10	1	5	36	38.3
<i>Dysphania ambrosioides</i> (L.) Mosyakin & Clemants	Chenopodiaceae	Th, Hem	AE	Rd	R, AgH	7	0	0	4	0	0	11	11.7
<i>Echinops spinosissimus</i> Turra	Asteraceae	Hem	D	Ap	NHO	0	0	0	0	1	3	4	4.3
<i>Echium horridum</i> Batt.	Boraginaceae	Th	A	Ap	NHO	16	0	0	10	0	0	26	27.7
<i>Echium plantagineum</i> L.	Boraginaceae	Th	J	Rd	R	1	2	8	1	0	4	16	17
<i>Emex spinosa</i> (L.) Campd.	Polygonaceae	Th	J	Rd	R	4	4	11	2	8	11	40	42.6
<i>Erodium cicutarium</i> (L.) L'Hér.	Geraniaceae	Th	Z	Ag	AgH, NHO	4	1	3	0	0	0	8	8.5
<i>Erodium moschatum</i> (L.) L'Hér.	Geraniaceae	Th	J	Ag	AgH, NHO	6	0	0	4	0	2	12	12.8
<i>Eryngium campestre</i> L.	Apiaceae	Hem	N	Ap	NHO	0	0	2	0	1	0	3	3.2
<i>Euphorbia exigua</i> L.	Euphorbiaceae	Th	V	Ag	AgH	5	0	0	6	0	0	11	11.7
<i>Euphorbia helioscopia</i> L.	Euphorbiaceae	Th	AE	Ag	Agh, NHO	0	0	0	0	3	0	3	3.2
<i>Euphorbia medicaginea</i> Boiss.	Euphorbiaceae	Th	B	Ag	AgH, NHO	1	3	2	0	1	0	7	7.4
<i>Fallopia convolvulus</i> (L.) A. Löve	Polygonaceae	Th	Z	Ag	AgH, NHO	0	0	3	0	2	0	5	5.3
<i>Fedia cornucopiae</i> (L.) Gaertner	Valerianaceae	Th	B	Ag	AgH, NHO	0	1	0	10	3	1	15	16
<i>Filago gallica</i> L.	Asteraceae	Th	D	Ag	AgH, NHO	1	0	0	0	0	0	1	1.1
<i>Filago micropodioides</i> Lange	Asteraceae	Th	C	Ap	NHO	1	0	0	0	0	0	1	1.1
<i>Filago pyramidata</i> L.	Asteraceae	Th	D	Ap	NHO	5	0	0	0	0	0	5	5.3
<i>Filago ramosissima</i> Lange*	Asteraceae	Th	B	Ap	NHO	0	0	0	0	3	6	9	9.6
<i>Foeniculum vulgare</i> Miller	Apiaceae	Hem	AF	Rd	R, NHO	2	0	0	0	0	0	2	2.1
<i>Fumaria agraria</i> Lag.	Papaveraceae	Th	F	Ag	AgH, NHC, NHO	6	0	0	0	0	0	6	6.4

<i>Fumaria melillaica</i> Pugsley*	Papaveraceae	Th	B	Ag	AgH, NHO	0	0	0	0	0	2	2	2.1
<i>Fumaria officinalis</i> L.	Papaveraceae	Th	M	Ag	AgH, NHO	0	0	0	4	3	3	10	10.6
<i>Fumaria parviflora</i> Lam.	Papaveraceae	Th	D	Ag	AgH, NHO	2	0	0	8	1	0	11	11.7
<i>Galactites tomentosus</i> Moench	Asteraceae	Th	D	Rd	R	4	1	11	5	2	6	29	30.9
<i>Galium aparine</i> L.	Rubiaceae	Th	AD	Ag	AgH, NHO	1	3	0	1	2	0	7	7.4
<i>Galium tricornutum</i> Dandy	Rubiaceae	Th	X	Ag	AgH	2	0	0	4	0	0	6	6.4
<i>Galium verrucosum</i> Hudson	Rubiaceae	Th	J	Ag	AgH, NHO	7	0	0	1	3	9	20	21.3
<i>Geranium molle</i> L.	Geraniaceae	Th	AF	Ag	AgH, NHO	0	0	2	3	0	3	8	8.5
<i>Geranium rotundifolium</i> L.	Geraniaceae	Th	AF	Rd	R, NHO	0	1	0	0	0	0	1	1.1
<i>Gladiolus italicus</i> Mill.	Iridaceae	G	S	Ag	AgH, R	0	1	2	0	6	1	10	10.6
<i>Glaucium flavum</i> Crantz	Papaveraceae	Hem	T	Ap	NHO	0	0	0	5	0	0	5	5.3
<i>Glebionis coronaria</i> (L.) Spach	Asteraceae	Th	D	Ag	AgH, NHO	3	7	11	5	1	10	37	39.4
<i>Glebionis segetum</i> (L.) Fourr.	Asteraceae	Th	M	Ag	AgH	18	0	0	0	1	9	28	29.8
<i>Helminthotheca echioides</i> (L.) Holub	Asteraceae	Hem	L	Ag	AgH	0	0	0	0	5	1	6	6.4
<i>Herniaria hirsuta</i> L.	Caryophyllaceae	Th	P	Ag	AgH, NHO	2	0	0	0	0	0	2	2.1
<i>Heteranthemis viscidhirta</i> Schott	Asteraceae	Th	B	Ag	AgH, NHO	0	0	1	0	2	0	3	3.2
<i>Hirschfeldia incana</i> (L.) Lagrèze -Fossat	Brassicaceae	Hem, Th	K	Rd	R, AgH	9	3	5	5	3	5	30	31.9
<i>Hordeum murinum</i> L.	Poaceae	Th	AF	Rd	R, AgH	16	0	1	6	1	0	24	25.5
<i>Hyparrhenia sinaica</i> (Delile) G. López*	Poaceae	Th	AD	Ap	NHO	0	0	0	0	1	0	1	1.1
<i>Hypochaeris glabra</i> L.	Asteraceae	Hem, Th	O	Ag	AgH, NHO	3	0	1	5	0	0	9	9.6
<i>Hypochaeris radicata</i> L.	Asteraceae	Hem	M	Ap	NHC, NHO	0	0	3	5	0	0	8	8.5
<i>Lactuca serriola</i> L.	Asteraceae	Th	AD	Rd	R, NHC, NHO	1	0	0	16	0	0	17	18.1
<i>Lamarckia aurea</i> (L.) Moench	Poaceae	Th	AB	Ap	NHO	9	0	0	1	0	0	10	10.6
<i>Lamium amplexicaule</i> L.	Lamiaceae	Th	AG	Ag	AgH	6	0	0	4	0	0	10	10.6
<i>Lathyrus cicera</i> L.	Fabaceae	Th	J	Ag	AgH, NHC, NHO	0	0	0	0	3	0	3	3.2
<i>Lathyrus clymenum</i> L.	Fabaceae	Th	J	Ag	AgH	0	1	4	1	0	0	6	6.4
<i>Launaea nudicaulis</i> (L.) Hook. f.	Asteraceae	Th	B	Ap	NHO	9	0	0	1	6	0	16	17
<i>Lavandula stoechas</i> L.*	Lamiaceae	Ch	J	Ap	NHC, NHO	0	0	0	2	0	0	2	2.1
<i>Leontodon tuberosus</i> L.	Asteraceae	Hem	D	Ap	NHO	0	2	4	1	0	0	7	7.4

<i>Linaria incarnata</i> (Vent.) Sprengel	Scrophulariaceae	Th	B	Ag	AgH, NHC	0	0	0	0	0	1	1	1.1
<i>Linaria latifolia</i> Desf.	Scrophulariaceae	Th	B	Ag	AgH, NHC	2	2	0	0	0	0	4	4.3
<i>Lobularia maritima</i> (L.) Desv.	Brassicaceae	Hem	J	Ap	NHO	6	0	0	6	0	0	12	12.8
<i>Lolium multiflorum</i> Lam.	Poaceae	Th, Hem	P	Ap	AgH, NHC, NHO	0	0	0	0	1	5	6	6.4
<i>Lolium rigidum</i> Gaudin	Poaceae	Th	D	Ag	AgH, NHC, NHO	15	0	0	9	0	1	25	26.6
<i>Lolium temulentum</i> L.	Poaceae	Th	AD	Ag	AgH	0	3	13	0	0	0	16	17
<i>Lonicera implexa</i> Aiton*	Caprifoliaceae	Phan	D	Ap	NHC	1	0	0	0	0	0	1	1.1
<i>Lotus pedunculatus</i> Cav.*	Fabaceae	Hem	N	Ap	NHO	3	0	0	2	0	0	5	5.3
<i>Lythrum hyssopifolia</i> L.	Lythraceae	Th	AE	Ap	NHO	0	0	0	0	1	0	1	1.1
<i>Malva parviflora</i> L.	Malvaceae	Th	AF	Rd	R	6	0	0	0	0	1	7	7.4
<i>Malva trimestris</i> (L.) Salisb.	Malvaceae	Th	D	Ag	AgH	0	0	4	0	0	0	4	4.3
<i>Marrubium vulgare</i> L.	Lamiaceae	Ch	P	Rd	R	0	0	0	2	0	0	2	2.1
<i>Mauranthemum decipiens</i> (Pomel) Vogt & Oberpr.*	Asteraceae	Th	B	Ap	NHO	3	0	0	9	0	0	12	12.8
<i>Medicago murex</i> Willd.	Fabaceae	Th	T	Ag	AgH, R	6	0	0	2	0	0	8	8.5
<i>Medicago orbicularis</i> (L.) Bart.	Fabaceae	Th	S	Ag	AgH, NHO	1	0	0	0	0	0	1	1.1
<i>Medicago polymorpha</i> L.	Fabaceae	Hem	AD	Ag	AgH, NHO, R	5	5	8	0	7	1	26	27.7
<i>Melilotus sulcatus</i> Desf.	Fabaceae	Th	J	Ag	AgH, NHO	0	6	3	0	2	2	13	13.8
<i>Mercurialis annua</i> L.	Euphorbiaceae	Th	AD	Rd	R, AgH	2	0	0	0	3	0	5	5.3
<i>Misopates calycinum</i> Rothm.*	Scrophulariaceae	Th	D	Ag	AgH, NHC	0	3	2	0	0	0	5	5.3
<i>Misopates orontium</i> (L.) Rafin.	Scrophulariaceae	Th	D	Ag	AgH, NHC	6	0	0	0	0	0	6	6.4
<i>Muscari comosum</i> (L.) Mill.	Asparagaceae	G	D	Ag	AgH, NHC, NHO	6	4	3	0	5	4	22	23.4
<i>Myriolimon ferulaceum</i> (L.) Lledó, Erben & Crespo	Caryophyllaceae	Ch	D	Ap	NHO	0	0	0	3	0	0	3	3.2
<i>Myrtus communis</i> L.*	Myrtaceae	Phan	D	Ap	NHC	0	0	0	1	0	0	1	1.1
<i>Ochlopoa annua</i> (L.) H. Scholz	Poaceae	Th	AD	Ag	AgH, NHO	0	0	3.5	9.5	2	3	18	19.1
<i>Onopordum macracanthum</i> Schousb.	Asteraceae	Hem	B	Rd	R, NHO	4	0	0	0	0	0	4	4.3
<i>Oxalis pes-caprae</i> L.	Oxalidaceae	Hem	AJ	Rd	R	0	0	0	1	0	0	1	1.1
<i>Pallenis spinosa</i> (L.) Cass.	Asteraceae	Hem	D	Ap	NHO	9	4	0	0	0	0	13	13.8
<i>Papaver rhoeas</i> L.	Papaveraceae	Th	AF	Ag	AgH	8	5	1	7	3	9	33	35.1
<i>Papaver somniferum</i> L.	Papaveraceae	Th	W	Ag	AgH	0	0	0	0	0	1	1	1.1

<i>Paronychia argentea</i> Lam.	Caryophyllaceae	Hem	J	Rd	R, NHO	3	0	0	2	0	0	5	5.3
<i>Phalaris brachystachys</i> Link	Poaceae	Th	D	Ag	AgH, NHO	10	3	9	2	2	2	28	29.8
<i>Phalaris minor</i> Retz	Poaceae	Th	D	Ag	AgH, NHO	7	1	0	7	0	2	17	18.1
<i>Phalaris paradoxa</i> L.	Poaceae	Th	D	Ag	AgH, NHO	0	0	0	0	2	0	2	2.1
<i>Pistacia lentiscus</i> L.*	Anacardiaceae	Phan	J	Ap	NHC	2	0	0	8	0	0	10	10.6
<i>Plantago afra</i> L.	Plantaginaceae	Th	AF	Ag	AgH, NHO	12	1	0	0	0	2	15	16
<i>Plantago lanceolata</i> L.	Plantaginaceae	Th, Hem	AF	Ap	NHO	2	0	0	0	0	0	2	2.1
<i>Plantago serraria</i> L.*	Plantaginaceae	Hem	C	Ap	NHO	0	0	1	0	0	0	1	1.1
<i>Polycarpon tetraphyllum</i> (L.) L.	Caryophyllaceae	Th	AD	Ap	NHO	10	0	0	3	0	0	13	13.8
<i>Polygonum aviculare</i> L.	Polygonaceae	Th	AE	Rd	R, AgH	0	0	3	9	4	3	19	20.2
<i>Polypogon monspeliensis</i> (L.) Desf.	Poaceae	Th	U	Ap	NHO	0	0	0	0	0	1	1	1.1
<i>Quercus coccifera</i> L.*	Fagaceae	Phan	C	Ap	NHC	0	0	0	3	0	0	3	3.2
<i>Ranunculus muricatus</i> L.	Ranunculaceae	Th	J	Ap	NHO	0	1	2	0	1	0	4	4.3
<i>Raphanus raphanistrum</i> L.	Brassicaceae	Th	D	Ag	AgH, R	9	0	8	1	0	9	27	28.7
<i>Reichardia tingitana</i> (L.) Roth	Asteraceae	Th, Hem	I	Ap	NHO	0	0	0	0	2	0	2	2.1
<i>Reseda alba</i> L.	Resedaceae	Th	D	Rd	R, NHO	2	0	0	0	0	0	2	2.1
<i>Rhagadiolus stellatus</i> (L.) Gaertn.	Asteraceae	Th	D	Ag	AgH, NHO	0	1	0	0	0	0	1	1.1
<i>Ridolfia segetum</i> (Guss.) Moris	Apiaceae	Th	D	Ag	AgH	0	1	0	0	2	1	4	4.3
<i>Rostraria cristata</i> (L.) Tzvelev*	Poaceae	Th	AD	Ag	AgH, R, NHC	0	0	0	2	0	0	2	2.1
<i>Rubia peregrina</i> L.	Rubiaceae	Hem	O	Ap	NHC	0	0	0	2	0	0	2	2.1
<i>Rumex acetosella</i> L.*	Polygonaceae	Hem	AE	Rd	R, NHO	0	0	0	5	0	0	5	5.3
<i>Rumex bucephalophorus</i> L.	Polygonaceae	Th	D	Rd	R, NHO	11	0	0	4	4	7	26	27.7
<i>Rumex crispus</i> L.	Polygonaceae	Hem	AD	Rd	R, NHO	0	0	0	5	0	0	5	5.3
<i>Rumex induratus</i> Boiss. & Reuter*	Polygonaceae	Ch, G	B	Ap	NHO	3	0	0	0	0	0	3	3.2
<i>Rumex pulcher</i> L.	Polygonaceae	Hem	AC	Rd	R, NHO	0	0	2	0	0	0	2	2.1
<i>Rumex thyrsoides</i> Desf.	Polygonaceae	Hem	C	Ap	NHO	0	0	0	0	0	8	8	8.5
<i>Scandix pecten-veneris</i> L.	Apiaceae	Th	AF	Ag	AgH, NHO	8	0	0	2	0	0	10	10.6
<i>Scolymus maculatus</i> L.	Asteraceae	Th	D	Ag	AgH, NHO	1	0	0	0	1	0	2	2.1
<i>Scorpiurus muricatus</i> L.	Fabaceae	Th	D	Ag	AgH, NHO	2	7	2	0	4	1	16	17

<i>Scorzoneroides muelleri</i> (Sch. Bip.) Greuter & Talavera	Asteraceae	Th	B	Ap	NHO	0	0	1	0	0	7	8	8.5
<i>Scrophularia canina</i> L.*	Scrophulariaceae	Ch	M	Ap	NHO	0	0	6	0	0	0	6	6.4
<i>Senecio leucanthemifolius</i> Poiret	Asteraceae	Th	D	Ag	AgH, NHO	9	0	0	10	0	15	34	36.2
<i>Senecio vulgaris</i> L.	Asteraceae	Th	AD	Ag	AgH, NHO, NHC	0	0	0	14	0	0	14	14.9
<i>Setaria verticillata</i> (L.) P. Beauv.	Poaceae	Th	AE	Rd	R, AgH	4	0	0	0	0	0	4	4.3
<i>Sherardia arvensis</i> L.	Rubiaceae	Th	AC	Ag	AgH, NHO	9	5	2	11	2	1	30	31.9
<i>Silene diversifolia</i> Otth*	Caryophyllaceae	Th	J	Ag	AgH, NHO	0	0	0	1	0	0	1	1.1
<i>Silene gallica</i> L.	Caryophyllaceae	Th	AD	Ag	AgH, NHO	20	2	7	5	1	12	47	50
<i>Silene nocturna</i> L.	Caryophyllaceae	Th	AF	Ap	NHO	0	0	0	1	0	0	1	1.1
<i>Silene vulgaris</i> (Moench) Garcke	Caryophyllaceae	Hem, G	AG	Ag	AgH, NHO	13	3	1	7	1	6	31	33
<i>Silybum marianum</i> (L.) Gaertn.	Asteraceae	Th, Hem	D	Rd	R, AgH	0	0	2	0	5	4	11	11.7
<i>Sinapis arvensis</i> L.	Brassicaceae	Th	AG	Ag	AgH	2	0	5	0	8	8	23	24.5
<i>Sisymbrium officinale</i> (L.) Scop.	Brassicaceae	Th	AD	Ag	R	5	0	0	1	0	0	6	6.4
<i>Smilax aspera</i> L.*	Smilacaceae	Phan	J	Ap	NHC, NHO	0	0	0	1	2	0	3	3.2
<i>Solanum nigrum</i> L.	Solanaceae	Th	AE	Rd	R, AgH	1	0	0	0	0	0	1	1.1
<i>Sonchus asper</i> (L.) Hill	Asteraceae	Th, Hem	AE	Rd	R, AgH	1	0	0	0	0	0	1	1.1
<i>Sonchus oleraceus</i> L.	Asteraceae	Th	AE	Rd	R, AgH	10	4	9	3	0	0	26	27.7
<i>Spergula arvensis</i> L.	Caryophyllaceae	Th	AD	Ag	AgH, NHO	0	0	0	0	0	1	1	1.1
<i>Spergularia diandra</i> (Guss.) Boiss.	Caryophyllaceae	Th	L	Ag	AgH, NHO	0	0	0	2	0	0	2	2.1
<i>Stachys arvensis</i> (L.) L.	Lamiaceae	Th	O	Ag	AgH, NHO	0	1	5	2	1	1	10	10.6
<i>Stellaria media</i> (L.) Cirillo	Caryophyllaceae	Th	AD	Rd	R	0	0	2	9	0	0	11	11.7
<i>Teucrium fruticans</i> L.*	Lamiaceae	Ch, Ph	C	Ap	NHC, NHO	1	0	0	2	0	0	3	3.2
<i>Tolpis barbata</i> (L.) Gaertn.	Asteraceae	Th	C	Ap	NHC, NHO	0	0	6	0	1	0	7	7.4
<i>Tolpis barbata</i> (L.) Gaertn.	Apiaceae	Th	AF	Ag	AgH, NHO	3	0	1	0	0	0	4	4.3
<i>Trifolium angustifolium</i> L.	Fabaceae	Th	J	Ap	NHC, NHO	0	0	0	3	0	0	3	3.2
<i>Trifolium campestre</i> Schreber	Fabaceae	Th	X	Ag	AgH, NHO	0	0	0	2	0	0	2	2.1
<i>Trifolium stellatum</i> L.	Fabaceae	Th	J	Ag	AgH, NHC, NHO	0	2	0	0	0	2	4	4.3
<i>Tripodion tetraphyllum</i> (L.) Fourr.	Fabaceae	Th	D	Ag	AgH, NHC, NHO	0	1	0	0	0	0	1	1.1
<i>Umbilicus horizontalis</i> (Guss.) DC.*	Crassulaceae	Hem	F	Ap	NHO	0	0	0	5	0	0	5	5.3

<i>Urtica urens</i> L.	Urticaceae	Th	M	Rd	R	2	0	0	4	1	0	7	7.4
<i>Vaccaria hispanica</i> (Miller) Rauschert	Caryophyllaceae	Th	AD	Ag	AgH	0	1	0	0	0	0	1	1.1
<i>Verbascum sinuatum</i> L.	Scrophulariaceae	Th, Hem	D	Rd	R, NHC	2	0	0	0	0	0	2	2.1
<i>Verbesina encelioides</i> (Cav.) A. Gray*	Asteraceae	Th, Hem	AI	Rd	R, AgH	0	0	0	0	0	4	4	4.3
<i>Vicia benghalensis</i> L.	Fabaceae	Th	D	Ag	AgH, NHO	0	0	0	0	0	5	5	5.3
<i>Vicia lutea</i> L.	Fabaceae	Th	AA	Ag	AgH, NHO	0	0	0	0	0	2	2	2.1
<i>Vicia sativa</i> subsp. <i>nigra</i> (L.) Ehrh.	Fabaceae	Th	AF	Ag	AgH, NHC, NHO	13	1	5	0	5	0	24	25.5
<i>Vulpia bromoides</i> (L.) Gray	Poaceae	Th	D	Ap	NHO, NHC	3	0	0	0	0	0	3	3.2
<i>Vulpia sicula</i> (C. Presl) Link*	Poaceae	Th, Hem	D	Ap	NHO, NHC	3	0	0	3	0	0	6	6.4

*: Species not listed in the index of segetal plants of Western and Central Morocco (Boulet et al. 1989)

** : Categorization is based on expert knowledge