

Appendix 1

Table A1. Species classification scheme to attribute the HI (from Signorini (1996). P: plant life form; I: invasiveness and vigour; R: root system.

P	I	R	HI	
0 - Terophyta	0.0 - Non-reptantia with normal growth	0.0.0 - Without taproot	0	
		0.0.1 - With weak taproot	1	
		0.0.2 - With sturdy taproot	2	
	0.1 - Reptantia with normal growth	0.1.0 - Without taproot	1	
		0.1.1 - With weak taproot	2	
		0.1.2 - With sturdy taproot	3	
	0.2 - Species with very vigorous growth	0.2.0 - Without taproot	2	
		0.2.1 - With weak taproot	3	
		0.2.2 - With sturdy taproot	4	
	1 - Hemicryptophyta biennials	1.0 - Non-reptantia and reptantia	1.0.0 - Without taproot	1
			1.0.1 - With weak taproot	2
			1.0.2 - With sturdy taproot	3
2 - Hemicryptophyta perennials	2.0 - Mosses and lichens	2.0.0 - Without taproot	2	
	2.1 - Grasses not invasive or with frail growth	2.1.0 - Without taproot	3	
		2.1.1 - With weak taproot	4	
3 - 4 - Phanerophyta (shrubs)	3.0 - Suffrutex	2.1.2 - With sturdy taproot	5	
		3.0.0 - Not very intrusive	3	
		3.0.1 - Intrusive	4	
	4.0 - Non-polloniferous or small shrubs	3.0.2 - Very intrusive	5	
		4.0.0 - Not very intrusive	4	
		4.0.1 - Intrusive	5	
	4.1 - Polloniferous shrubs	4.0.2 - Very intrusive	6	
		4.1.0 - Not very intrusive	5	
		4.1.1 - Intrusive	6	
	4.2 - Shrubs with root sprouters	4.1.2 - Very intrusive	7	
		4.2.0 - Not very intrusive	6	
		4.2.1 - Intrusive	7	
5 - Phanerophyta (vines)	5.0 - Non-polloniferous	4.2.2 - Very intrusive	8	
		5.0.0 - Not very intrusive	5	
		5.0.1 - Intrusive	6	
	5.1 - Polloniferous	5.0.2 - Very intrusive	7	
		5.1.0 - Not very intrusive	6	
		5.1.1 - Intrusive	7	
6 - Phanerophyta (trees)	6.0 - Non-polloniferous	5.1.2 - Very intrusive	8	
		6.0.0 - Not very intrusive	6	
		6.0.1 - Intrusive	7	
	6.1 - With basal sprouters	6.0.2 - Very intrusive	8	
		6.1.0 - Not very intrusive	7	
		6.1.1 - Intrusive	8	
	6.2 - With root sprouters too	6.1.2 - Very intrusive	9	
		6.2.0 - Not very intrusive	8	
		6.2.1 - Intrusive	9	
		6.2.2 - Very intrusive	10	

Table A2. Plant species recorded at PFAF.

Species	Family	Chorology	Plant life form	HI
<i>Ailanthus altissima</i> (Mill.) Swingle	Simaroubaceae	Invasive alien (China)	P scap/caesp	10
<i>Amaranthus retroflexus</i> L.	Amaranthaceae	Invasive alien (N America)	T scap	2
<i>Andryala integrifolia</i> L.	Asteraceae	W-Euri-Medit.	T scap	1
<i>Anisantha madritensis</i> (L.) Nevski subsp. <i>madritensis</i>	Poaceae	Euri-Medit.	T scap	1
<i>Antirrhinum majus</i> L. subsp. <i>tortuosum</i> (Bosc ex Lam.) Rouy	Plantaginaceae	Naturalized alien (W Medit.)	Ch frut	6
<i>Antirrhinum siculum</i> Mill.	Plantaginaceae	Endemic	Ch frut	6
<i>Arenaria leptoclados</i> (Rchb.) Guss. subsp. <i>leptoclados</i>	Caryophyllaceae	Paleotemp.	T scap	1
<i>Artemisia annua</i> L.	Asteraceae	Invasive alien (E Europe, W and C Asia)	T scap	4
<i>Artemisia arborescens</i> (Vaill.) L.	Asteraceae	S-Medit.	NP	8
<i>Avena barbata</i> Pott ex Link	Poaceae	Euri-Medit.-Turán.	T scap	2
<i>Bituminaria bituminosa</i> (L.) C.H.Stirt.	Fabaceae	Euri-Medit.	H scap	5
<i>Blackstonia perfoliata</i> (L.) Huds. subsp. <i>intermedia</i> (Ten.) Zeltner	Gentianaceae	Euri-Medit.	T scap	0
<i>Brachypodium distachyon</i> (L.) P.Beauv.	Poaceae	Steno-Medit.-Turán.	T scap	1
<i>Bromus hordeaceus</i> L. subsp. <i>hordeaceus</i>	Poaceae	Subcosmop.	T scap	1
<i>Campanula erinus</i> L.	Campanulaceae	Steno-Medit.	T scap	1
<i>Capparis orientalis</i> Veill.	Capparaceae	Eurasiat. (Subtropic.)	NP	8
<i>Capsella rubella</i> Reut.	Brassicaceae	Euri-Medit.	H bienn	1
<i>Cardamine hirsuta</i> L.	Brassicaceae	Cosmop.	T scap	0
<i>Catapodium rigidum</i> (L.) C.E.Hubb. subsp. <i>rigidum</i>	Poaceae	Euri-Medit.	T scap	0
<i>Celtis australis</i> L. subsp. <i>australis</i>	Cannabaceae	Euri-Medit.	P scap	10
<i>Centaurea deusta</i> Ten.	Asteraceae	SE-Europ.	H bienn	2
<i>Centaureum erythraea</i> Rafn subsp. <i>erythraea</i>	Gentianaceae	Paleotemp.	H bienn	0
<i>Cerastium brachypetalum</i> Desp. ex Pers. subsp. <i>roeseri</i> (Boiss. & Heldr.) Nyman	Caryophyllaceae	Steno-Medit.-Turán.	T scap	1
<i>Cinnamomum glanduliferum</i> (Wall.) Meisn.	Lauraceae	Casual alien (Asia)	P scap	10
<i>Clematis vitalba</i> L.	Ranunculaceae	Europ.-Caucas.	P lian	7

<i>Clinopodium nepeta</i> (L.) Kuntze subsp. <i>nepeta</i>	Lamiaceae	Medit.-Mont.(Euri-)	Ch suffr	5
<i>Crepis bursifolia</i> L.	Asteraceae	SE-Europ.	H scap	4
<i>Crepis neglecta</i> L. subsp. <i>neglecta</i>	Asteraceae	NE-Euri-Medit.	T scap	1
<i>Cymbalaria muralis</i> G.Gaertn., B.Mey. & Scherb. subsp. <i>muralis</i>	Plantaginaceae	Europ.	H caesp	4
<i>Cynodon dactylon</i> (L.) Pers.	Poaceae	Thermo-Cosmop.	G rhiz	4
<i>Cytisus infestus</i> (C.Presl) Guss. subsp. <i>infestus</i>	Fabaceae	Centro-Medit.	P caesp	8
<i>Dactylis glomerata</i> L. subsp. <i>glomerata</i>	Poaceae	Paleotemp.	H caesp	4
<i>Daucus carota</i> L. s.l.	Apiaceae	Subcosmop.	H bienn	4
<i>Digitaria sanguinalis</i> (L.) Scop.	Poaceae	Cryptogenic	T scap	1
<i>Diploaxis tenuifolia</i> (L.) DC.	Brassicaceae	Submedit.-Subatlant.	H scap	4
<i>Dittrichia viscosa</i> (L.) Greuter subsp. <i>viscosa</i>	Asteraceae	Euri-Medit.	H scap	5
<i>Echium plantagineum</i> L.	Boraginaceae	Euri-Medit.	T scap	4
<i>Emerus major</i> Mill. subsp. <i>emeroides</i> (Boiss. & Spruner) Soldano & F.Conti	Fabaceae	E-Medit.-Pontica	NP	8
<i>Epilobium lanceolatum</i> Sebast. & Mauri	Onagraceae	W-Europ. (Subatl.)	H scap	4
<i>Erigeron bonariensis</i> L.	Asteraceae	Invasive alien (S America)	T scap	2
<i>Erigeron karvinskianus</i> DC.	Asteraceae	Naturalized alien (N, Center and S America)	H scap	4
<i>Erigeron sumatrensis</i> Retz.	Asteraceae	Invasive alien (S America)	T scap	2
<i>Erodium cicutarium</i> (L.) L'Hér.	Geraniaceae	Subcosmop.	T scap	1
<i>Eupatorium cannabinum</i> L. subsp. <i>cannabinum</i>	Asteraceae	Paleotemp.	H scap	4
<i>Euphorbia helioscopia</i> L. subsp. <i>helioscopia</i>	Euphorbiaceae	Cosmop.	T scap	2
<i>Euphorbia nutans</i> Lag.	Euphorbiaceae	Naturalized alien (N America)	T scap	1
<i>Euphorbia peplus</i> L.	Euphorbiaceae	Cosmop.	T scap	1
<i>Ferula glauca</i> L.	Apiaceae	Steno-Medit.	H scap	5
<i>Festuca danthonii</i> Asch. & Graebn. subsp. <i>danthonii</i>	Poaceae	Euri-Medit.	T caesp	0
<i>Festuca myuros</i> L. subsp. <i>myuros</i>	Poaceae	Subcosmop.	T caesp	0
<i>Ficus carica</i> L.	Moraceae	Medit.-Turán.	P scap	10
<i>Foeniculum vulgare</i> Mill. subsp. <i>piperitum</i> (Ucria) Bég.	Apiaceae	Euri-Medit.	H bienn	5
<i>Fumaria officinalis</i> L. subsp. <i>wirtgenii</i> (W.D.J.Koch) Arcang.	Papaveraceae	Subcosmop.	T scap	1

<i>Galactites tomentosus</i> Moench	Asteraceae	Steno-Medit.	H bienn	2
<i>Galium murale</i> (L.) All.	Rubiaceae	Steno-Medit.	T scap	0
<i>Gamochaeta pensylvanica</i> (Willd.) Cabrera	Asteraceae	Naturalized alien (N, Centre and S America)	T scap	3
<i>Geranium purpureum</i> Vill.	Geraniaceae	Euri-Medit.	T scap	2
<i>Geranium rotundifolium</i> L.	Geraniaceae	Paleotemp.	T scap	2
<i>Glebionis segetum</i> (L.) Fourr.	Asteraceae	Euri-Medit.	T scap	2
<i>Hedera helix</i> L. subsp. <i>helix</i>	Araliaceae	Submedit.-Subatlant.	P lian	7
<i>Helichrysum litoreum</i> Guss.	Asteraceae	Endemic	Ch suffr	5
<i>Hordeum murinum</i> L. subsp. <i>leporinum</i> (Link) Arcang.	Poaceae	Circumbor.	T scap	2
<i>Hypericum perforatum</i> L. subsp. <i>veronense</i> (Schrank) Ces.	Hypericaceae	Subcosmop.	H bienn	6
<i>Jacobaea maritima</i> (L.) Pelsér & Meijden subsp. <i>bicolor</i> (Willd.) B.Nord. & Greuter	Asteraceae	Endemic	Ch suffr	4
<i>Linum strictum</i> L.	Linaceae	Steno-Medit.	T scap	1
<i>Lobularia maritima</i> (L.) Desv.	Brassicaceae	Steno-Medit.-Macarones.	Ch suffr	4
<i>Lolium perenne</i> L.	Poaceae	Circumbor.	H caesp	3
<i>Lotus ornithopodioides</i> L.	Fabaceae	Steno-Medit.	T scap	0
<i>Lysimachia arvensis</i> (L.) U.Manns & Anderb. subsp. <i>arvensis</i>	Primulaceae	Subcosmop.	T rept	1
<i>Matthiola incana</i> (L.) W.T.Aiton subsp. <i>incana</i>	Brassicaceae	Steno-Medit.	Ch suffr	6
<i>Medicago arabica</i> (L.) Huds.	Fabaceae	Euri-Medit.	T scap	1
<i>Medicago lupulina</i> L.	Fabaceae	Paleotemp.	T scap	1
<i>Medicago minima</i> (L.) L.	Fabaceae	Euri-Medit.-Centro-Asiat.	T scap	1
<i>Medicago orbicularis</i> (L.) Bartal.	Fabaceae	Euri-Medit.	T scap	1
<i>Mercurialis annua</i> L.	Euphorbiaceae	Paleotemp.	T scap	1
<i>Micromeria graeca</i> (L.) Benth. ex Rchb. subsp. <i>tenuifolia</i> (Ten.) Nyman	Lamiaceae	Endemic	Ch suffr	4
<i>Misopates orontium</i> (L.) Raf.	Plantaginaceae	Paleotemp.	T scap	1
<i>Nicotiana glauca</i> Graham	Solanaceae	Naturalized alien (E Europe, W and Centre Asia)	NP	8
<i>Oloptum miliaceum</i> (L.) Röser & H.R.Hamasha	Poaceae	Steno-Medit.-Turan.	H caesp	4
<i>Oxalis corniculata</i> L.	Oxalidaceae	Cosmop.	H rept	4

<i>Papaver rhoeas</i> L. subsp. <i>rhoeas</i>	Papaveraceae	Cryptogenic	T scap	1
<i>Parietaria judaica</i> L.	Urticaceae	Euri-Medit.-Macarones.	H scap	5
<i>Parthenocissus quinquefolia</i> (L.) Planch.	Vitaceae	Naturalized alien (N America) Invasive alien (Trop. Africa, America, Asia)	P lian	7
<i>Paspalum distichum</i> L.	Poaceae		G rh	2
<i>Petrosedum rupestre</i> (L.) P.V.Heath	Crassulaceae	Centro-Europ.-W-Medit.	Ch succ	3
<i>Phagnalon rupestre</i> (L.) DC. subsp. <i>illyricum</i> (H.Lindb.) Ginzb.	Asteraceae	Illir.-Austroital.	Ch suffr	4
<i>Picris hieracioides</i> L. subsp. <i>hieracioides</i>	Asteraceae	Eurosib.	H scap	5
<i>Pinus halepensis</i> Mill. subsp. <i>halepensis</i>	Pinaceae	Steno-Medit.	P scap	10
<i>Pistacia lentiscus</i> L.	Anacardiaceae	S-Medit.-Macarones.	P caesp	8
<i>Plantago major</i> L.	Plantaginaceae	Subcosmop.	H ros	3
<i>Poa annua</i> L.	Poaceae	Cosmop.	T caesp	0
<i>Polycarpon tetraphyllum</i> (L.) L. subsp. <i>diphyllum</i> (Cav.) O.Bolòs & Font Quer	Caryophyllaceae	Steno-Medit.	T scap	1
<i>Polypogon viridis</i> (Gouan) Breistr. subsp. <i>viridis</i>	Poaceae	Termo-Cosmop.	H caesp	3
<i>Portulaca oleracea</i> L.	Portulacaceae	Cryptogenic	T scap	2
<i>Quercus pubescens</i> Willd. subsp. <i>pubescens</i>	Fagaceae	Europ.-Subpontica	P scap	10
<i>Reichardia picroides</i> (L.) Roth	Asteraceae	Euri-Medit.	H scap	6
<i>Reseda alba</i> L. subsp. <i>alba</i>	Resedaceae	Steno-Medit.	H scap	6
<i>Rhamnus alaternus</i> L. subsp. <i>alaternus</i>	Rhamnaceae	Steno-Medit.	P caesp	8
<i>Rostraria cristata</i> (L.) Tzvelev	Poaceae	Subcosmop.	T caesp	1
<i>Rubia peregrina</i> L.	Rubiaceae	Steno-Medit.-Macarones.	P lian	6
<i>Rubus ulmifolius</i> Schott	Rosaceae	Euri-Medit.	P caesp	8
<i>Sabulina tenuifolia</i> (L.) Rchb. subsp. <i>tenuifolia</i>	Caryophyllaceae	Paleotemp.	T scap	0
<i>Samolus valerandi</i> L.	Primulaceae	Subcosmop.	H scap	4
<i>Scorpiurus muricatus</i> L.	Fabaceae	Euri-Medit.	T scap	0
<i>Senecio vulgaris</i> L. subsp. <i>vulgaris</i>	Asteraceae	Cosmop.	T scap	1
<i>Setaria verticillata</i> (L.) P.Beauv.	Poaceae	Termo-Cosmop.	T scap	1
<i>Silene gallica</i> L.	Caryophyllaceae	Subcosmop.	T scap	1
<i>Sixalix atropurpurea</i> (L.) Greuter & Burdet	Dipsacaceae	Steno-Medit.	H bienn	3

<i>Solanum nigrum</i> L.	Solanaceae	Cosmop.	T scap	3
<i>Sonchus asper</i> (L.) Hill subsp. <i>asper</i>	Asteraceae	Subcosmop.	H scap	5
<i>Sonchus oleraceus</i> L.	Asteraceae	Subcosmop.	T scap	4
<i>Sonchus tenerrimus</i> L.	Asteraceae	Steno-Medit.	H bienn	5
<i>Spartium junceum</i> L.	Fabaceae	Euri-Medit.	P caesp	8
<i>Stachys major</i> (L.) Bartolucci & Peruzzi	Lamiaceae	Steno-Medit.	Ch suffr	4
<i>Stellaria media</i> (L.) Vill. subsp. <i>media</i>	Caryophyllaceae	Cosmop.	T rept	1
<i>Symphotrichum squamatum</i> (Spreng.) G.L.Nesom	Asteraceae	Invasive alien (S America)	H scap	5
<i>Taraxacum officinale</i> (L.) W.W.Weber ex F.H.Wigg. (group)	Asteraceae	Cosmop.	H ros	4
<i>Trifolium campestre</i> Schreb.	Fabaceae	W-Paleotemp.	T scap	1
<i>Trifolium nigrescens</i> Viv. subsp. <i>nigrescens</i>	Fabaceae	Euri-Medit.	T scap	1
<i>Trifolium repens</i> L.	Fabaceae	Subcosmop.	H rept	5
<i>Trifolium scabrum</i> L.	Fabaceae	Euri-Medit.	T rept	2
<i>Trigonella esculenta</i> Willd.	Fabaceae	N-Medit. (Steno-)	T scap	3
<i>Trigonella officinalis</i> (L.) Coulot & Rabaute	Fabaceae	Subcosmop.	H bienn	4
<i>Ulmus minor</i> Mill. subsp. <i>minor</i>	Ulmaceae	Europ.-Caucas.	P scap	10
<i>Valantia muralis</i> L.	Rubiaceae	Steno-Medit.	T scap	1
<i>Verbascum sinuatum</i> L.	Scrophulariaceae	Euri-Medit.	H bienn	4
<i>Verbena officinalis</i> L.	Verbenaceae	Cosmop.	H scap	4
<i>Veronica arvensis</i> L.	Plantaginaceae	Subcosmop.	T scap	1
<i>Veronica cymbalaria</i> Bodard subsp. <i>cymbalaria</i>	Plantaginaceae	Euri-Medit.	T scap	2

Tab. S1 Inventory of the deteriogenic vascular flora at the study sites reporting species, family, chorology, plant form and Hazard Index value.