

Table 1 - Dye plants catalogue, sorted by APG IV criteria.

Family and Botanical Name	Part/s used	Color/s	Pigment/s	References
Lycopodiaceae				
<i>Diphasiastrum alpinum</i> (L.) J. Holub	Whole plant	Yellow	Carotenoids	Briganti, 1842
<i>Diphasiastrum zeilleri</i> (Rouy) J. Holub	Whole plant	Yellow	Carotenoids	Briganti, 1842
<i>Lycopodium clavatum</i> L.	Whole plant	Yellow	Carotenoids	Ucria, 1789 Briganti, 1842
Selaginellaceae				
<i>Selaginella denticulata</i> (L.) Spring	Whole plant	Yellow	Carotenoids	Briganti, 1842
Polypodiaceae				
<i>Polypodium vulgare</i> L.	Roots	Red	PAHs, Carotenoids, Anthocyanins	Briganti, 1842
Pinaceae				
<i>Abies alba</i> Mill.	Young branches Soot	Brown Black	Tannins Anthocyanins, Tannins, PAHs	Briganti, 1842
<i>Picea abies</i> (L.) H.Karst.	Top of the young branches Soot	Brown Black	Tannins Anthocyanins, Tannins, PAHs	Briganti, 1842 Kakhia, 2015
<i>Pinus halepensis</i> Mill.	Pulverized bark Cones Leaves	Red Yellow	PAHs, Carotenoids, Anthocyanins Carotenoids	Briganti, 1842 Fenaroli, 1967 Guarrera, 2006(a) Guarrera, 2006(b) Kakhia, 2015
<i>Pinus pinea</i> L.	Bark	Brown	Tannins	Briganti, 1842 Guarrera, 2006(b) Kakhia, 2015
<i>Pinus sylvestris</i> L.	Wood Bark from young branches Soot	Red Yellow Black	PAHs, Carotenoids, Anthocyanins Carotenoids Anthocyanins, Tannins, PAHs	Briganti, 1842 Guarrera, 2006(b) Kakhia, 2015
Taxodiaceae				
<i>Taxodium distichum</i> (L.) Rich. var. <i>distichum</i>	Branches	Yellow	Carotenoids	Briganti, 1842

Cupressaceae					
	<i>Cupressus sempervirens</i> L.	Branches	Yellow	Carotenoids	Briganti, 1842
	<i>Thuja occidentalis</i> L.	Young branches	Yellow	Carotenoids	Briganti, 1842
	<i>Platycladus orientalis</i> (L.) Franco	Branches with leaves	Yellow	Carotenoids	Briganti, 1842
Taxaceae					
	<i>Taxus baccata</i> L.	Bulge on the stem Fruit	Red	PAHs, Carotenoids, Anthocyanins	Briganti, 1842 Guarrera, 2006(b)
Magnoliaceae					
	<i>Liriodendron tulipifera</i> L.	Young branches Leaves	Yellow	Carotenoids	Briganti, 1842
Lauraceae					
	<i>Laurus nobilis</i> L.	Fresh leaves	Green		Briganti, 1842 Guarrera, 2006(b)
Aristolochiaceae					
	<i>Asarum europaeum</i> L.	Whole plant	Brown	Tannins	Briganti, 1842
	<i>Aristolochia clematitis</i> L.	Leaves Stem Flower	Yellow	Carotenoids	Briganti, 1842
Araceae					
	<i>Arum maculatum</i> L.	Leaves	Yellow	Carotenoids	Briganti, 1842
Dioscoreaceae					
	<i>Dioscorea communis</i> (L.) Caddick & Wilkin	Berries	Yellow	Carotenoids	Briganti, 1842
Colchicaceae					
	<i>Colchicum autumnale</i> L.	Flower	Yellow	Carotenoids	Briganti, 1842
Liliaceae					
	<i>Fritillaria imperialis</i> L.	Whole plant	Yellow	Carotenoids	Briganti, 1842
Smilacaceae					
	<i>Smilax aspera</i> L.	Unknown	Unknown	Unknown	Guarrera, 2006(b)
Asparagaceae					
	<i>Ruscus aculeatus</i> L.	Stem Leaves	Yellow	Carotenoids	Briganti, 1842
	<i>Convallaria majalis</i> L.	Roots Leaves	Yellow	Carotenoids	Briganti, 1842
	<i>Leopoldia comosa</i> (L.) Parl.	Flower	Blue	Indigotins	Guarrera, 2006(b)
	<i>Muscari negletum</i> Ten.	Flower	Blue	Indigotins	Guarrera, 2006(b)

	<i>Muscari atlanticum</i> Boiss. & Reut.	Flower	Blue	Indigotins	Guarrera, 2006(b)
Amaryllidaceae					
	<i>Allium cepa</i> L.	Leaves	Red	PAHs, Carotenoids, Anthocyanins	Briganti, 1842
			Yellow	Carotenoids	Guarrera, 2006(b)
	<i>Narcissus pseudonarcissus</i> L.	Branches Leaves	Yellow	Carotenoids	Briganti, 1842
Asphodelaceae					
	<i>Asphodelus aestivus</i> Brot.	Green capsule	Yellow	Carotenoids	Briganti, 1842
	<i>Asphodeline lutea</i> (L.) Rchb.	Green capsule	Yellow	Carotenoids	Briganti, 1842
Iridaceae					
	<i>Crocus imperati</i> Ten.	Stigmas	Yellow	Carotenoids	Briganti, 1842 Curreli & Loddo, 1983
	<i>Crocus biflorus</i> Mill.	Stigmas	Yellow	Carotenoids	Briganti, 1842 Curreli & Loddo, 1983 Guarrera, 2006(b)
	<i>Crocus vernus</i> (L.) Hill	Stigmas Flower	Yellow Red	Carotenoids PAHs, Carotenoids, Anthocyanins	Ucria, 1789 Briganti, 1842 Curreli & Loddo, 1983
	<i>Crocus longiflorus</i> Raf.	Stigmas	Yellow	Carotenoids	Briganti, 1842 Curreli & Loddo, 1983
	<i>Crocus thomasi</i> Ten.	Stigmas	Yellow	Carotenoids	Briganti, 1842 Curreli & Loddo, 1983
	<i>Crocus sativus</i> L.	Stigmas	Yellow	Carotenoids	Briganti, 1842 Curreli & Loddo, 1983 Kerry & David, 2001 Guarrera, 2006(a) Guarrera, 2006(b) Angelini et al., 2010 Caneva et al., 2013 Kakhia, 2015 Fioretti, 2016
	<i>Iris pseudacorus</i> L.	Roots	Yellow	Carotenoids	Briganti, 1842
	<i>Iris germanica</i> L.	Flower	Green	Chlorophylls	Ucria, 1789 Briganti, 1842 Caneva et al., 2013
Orchidaceae					

	<i>Gymnadenia nigra</i> (L.) Rchb.f.	Flower	Purple	Anthocyanins	Briganti, 1842
Poaceae					
	<i>Apera spica-venti</i> (L.) P.Beauv.	Spike	Green	Clorophylls	Briganti, 1842
	<i>Phragmites australis</i> (Cav.) Trin. ex Steud. subps. <i>australis</i>	Spike	Green	Clorophylls	Ucria, 1789 Briganti, 1842
	<i>Bromus secalinus</i> L.	Spike Grass	Green	Clorophylls	Ucria, 1789 Briganti, 1842
	<i>Triticum aestivum</i> L.	Dry culms	Yellow	Carotenoids	Briganti, 1842 Guarrera, 2006(b)
	<i>Sorghum bicolor</i> (L.) Moench	Seeds	Purple	Anthocyanins	Briganti, 1842
Commelinaceae					
	<i>Commelina communis</i> L.	Flower	Blue	Indigoidines	Briganti, 1842
Cannaceae					
	<i>Canna indica</i> L.	Seeds	Red	PAHs, Carotenoids, Anthocyanins	Briganti, 1842
Berberidaceae					
	<i>Berberis vulgaris</i> L.	Roots Bark Wood	Yellow	Carotenoids	Ucria, 1789 Briganti, 1842
Ranunculaceae					
	<i>Helleborus foetidus</i> L.	Flowery stem Leaves	Yellow	Carotenoids	Briganti, 1842
	<i>Actaea spicata</i> L.	Juice of berries	Black	Anthocyanins, Tannins, PAHs	Briganti, 1842
	<i>Caltha palustris</i> L.	Flower Grass	Yellow	Carotenoids	Briganti, 1842
	<i>Delphinium consolida</i> L.	Corolla	Blue	Indigoidines	Ucria 1789 Briganti, 1842
	<i>Consolida ajacis</i> (L.) Schur	Flowery stem Leaves	Green	Clorophylls	Briganti, 1842
	<i>Anemone nemorosa</i> L.	Leaves	Yellow	Carotenoids	Briganti, 1842
	<i>Clematis vitalba</i> L.	Lianas	Yellow	Carotenoids	Briganti, 1842
	<i>Pulsatilla montana</i> (Hoppe) Rchb.	Unknown	Unknown	Unknown	Guarrera, 2006
	<i>Ranunculus acris</i> L.	Flowery plant	Yellow	Carotenoids	Briganti, 1842
	<i>Thalictrum aquilegifolium</i> L.	Leaves Stem	Green	Clorophylls	Ucria, 1789 Briganti, 1842
	<i>Thalictrum flavum</i> L.	Roots	Yellow	Carotenoids	Ucria, 1789

		Leaves Flower			Briganti, 1842
	<i>Thalictrum minus</i> L.	Unknown	Unknown	Unknown	Guarrera, 2006(b)
Papaveraceae					
	<i>Papaver rhoeas</i> L.	Corolla	Red	PAHs, Carotenoids, Anthocyanins	Briganti, 1842 Türkmen et al., 2004 Guarrera, 2006(a) Guarrera, 2006(b) Maxia et al., 2013 Patil et al., 2019
	<i>Papaver somniferum</i> L.	Young soft stem Leaves	Yellow	Carotenoids	Briganti, 1842 Patil et al., 2019
	<i>Chelidonium majus</i> L.	Roots Sap Grass	Yellow Blue	Carotenoids Indigoidines	Briganti, 1842 Guarrera, 2006(a) Guarrera, 2006(b)
	<i>Fumaria officinalis</i> L.	Grass	Yellow	Carotenoids	Briganti, 1842 Guarrera, 2006(b)
Platanaceae					
	<i>Platanus acerifolia</i> (Aiton) Willd.	Wood Bark of branches	Red Yellow	PAHs, Carotenoids, Anthocyanins Carotenoids	Briganti, 1842
Loranthaceae					
	<i>Loranthus europaeus</i> Jacq.	Wood	Red	PAHs, Carotenoids, Anthocyanins	Briganti, 1842
Santalaceae					
	<i>Viscum album</i> L.	Branches Leaves	Yellow	Carotenoids	Briganti, 1842
Cynomoriaceae					
	<i>Cynomorium coccineum</i> L.	Whole plant	Red	PAHs, Carotenoids, Anthocyanins	Guarrera, 2006(b)
Paeoniaceae					
	<i>Paeonia officinalis</i> L.	Flower	Grey	PAHs, Tannins	Briganti, 1842
Crassulaceae					
	<i>Umbilicus rupestris</i> (Salisb.) Dandy	Unknown	Unknown	Unknown	Guarrera, 2006(b)
Grossulariaceae					
	<i>Ribes rubrum</i> L.	Berries	Red	PAHs, Carotenoids, Anthocyanins	Briganti, 1842

		Branches	Yellow	Carotenoids	
	<i>Ribes uva-crispa</i> L.	Branches Leaves	Yellow	Carotenoids	Briganti, 1842
Vitaceae					
	<i>Vitis vinifera</i> L.	Unknown	Unknown	Unknown	Guarrera, 2006(b)
Tamaricaceae					
	<i>Tamarix gallica</i> L.	Green branches	Yellow	Carotenoids	Briganti, 1842 Guarrera, 2006(b)
	<i>Tamarix africana</i> Poir.	Unknown	Unknown	Unknown	Guarrera, 2006(b)
	<i>Myricaria germanica</i> (L.) Desv. subsp. <i>germanica</i>	Fruit	Black	Anthocyanins, Tannins, PAHs	Briganti, 1842
Plumbaginaceae					
	<i>Plumbago europaea</i> L.	Grass	Yellow	Carotenoids	Briganti, 1842
	<i>Limonium virgatum</i> (Willd.) Fourr. subsp. <i>virgatum</i>	Flower	Blue	Indigoidines	Briganti, 1842 Kakhia, 2015
Polygonaceae					
	<i>Polygonum aviculare</i> L.	Whole plant Leaves	Yellow Blue	Carotenoids Indigoidines	Briganti, 1842
	<i>Fallopia convolvulus</i> (L.) Á.Löve	Dry plant	Yellow	Carotenoids	Briganti, 1842
	<i>Bistorta officinalis</i> Raf. subsp. <i>officinalis</i>	Roots	Red	PAHs, Carotenoids, Anthocyanins	Briganti, 1842
	<i>Persicaria maculosa</i> Gray subsp. <i>maculosa</i>	Grass	Yellow	Carotenoids	Ucria, 1789 Briganti, 1842
	<i>Persicaria lapathifolia</i> (L.) S. F. Gray subsp. <i>lapathifolia</i>	Leaves	Blue	Indigoidines	Briganti, 1842
	<i>Persicaria hydropiper</i> (L.) Delarbre	Grass	Yellow	Carotenoids	Briganti, 1842
	<i>Rumex acetosa</i> L.	Dry roots Fresh roots	Red Yellow	PAHs, Carotenoids, Anthocyanins Carotenoids	Ucria, 1789 Briganti, 1842 Guarrera, 2006(b) Angelini et al., 2010
	<i>Rumex alpinus</i> L.	Roots	Yellow	Carotenoids	Briganti, 1842 Angelini et al., 2010
	<i>Rumex aquaticus</i> L.	Fresh roots	Yellow	Carotenoids	Briganti, 1842 Angelini et al., 2010
	<i>Rumex sanguineus</i> L.	Grass	Yellow	Carotenoids	Briganti, 1842 Angelini et al., 2010
	<i>Rumex acutus</i> L.	Roots	Yellow	Carotenoids	Briganti, 1842

	<i>Rumex maritimus</i> L.	Roots	Yellow	Carotenoids	Angelini et al., 2010 Briganti, 1842 Angelini et al., 2010
Caryophyllaceae					
	<i>Stellaria alsine</i> Grimm	Whole plant	Green	Chlorophylls	Briganti, 1842
	<i>Scleranthus perennis</i> L.	Roots	Yellow	Carotenoids	Briganti, 1842
	<i>Silene vulgaris</i> (Moench) Garcke S. subsp. <i>vulgaris</i>	Leaves Flowery stem	Green	Chlorophylls	Briganti, 1842
	<i>Saponaria officinalis</i> L.	Pollen	Red	PAHs, Carotenoids, Anthocyanins	Briganti, 1842 Angelini et al., 2010
Amaranthaceae s.l.					
	<i>Celosia argentea</i> L.	Flower	Red	PAHs, Carotenoids, Anthocyanins	Briganti, 1842 Patil et al., 2019
	<i>Beta vulgaris</i> L. subsp. <i>vulgaris</i>	Roots	Red	PAHs, Carotenoids, Anthocyanins	Briganti, 1842 Patil et al., 2019
	<i>Chenopodium vulvaria</i> L.	Whole plant	Yellow	Carotenoids	Briganti, 1842
	<i>Spinacia oleracea</i> L.	Leaves	Green	Chlorophylls	Briganti, 1842
	<i>Atriplex hortensis</i> L.	Leaves Stem	Yellow	Carotenoids	Briganti, 1842 Angelini et al., 2010
Phytolaccaceae					
	<i>Phytolacca americana</i> L.	Juice of berries	Red	PAHs, Carotenoids, Anthocyanins	Briganti, 1842 Guarrera, 2006(b) Maxia et al., 2013 Kakhia, 2015
Cactaceae					
	<i>Opuntia ficus-indica</i> (L.) Mill.	Unknown	Unknown	Unknown	Guarrera, 2006(b)
Basellaceae					
	<i>Basella alba</i> L.	Berries	Purple	Anthocyanins	Ucria, 1789 Briganti, 1842 Patil et al., 2019
Buxaceae					
	<i>Buxus sempervirens</i> L.	Leaves Branches	Green	Chlorophylls	Briganti, 1842 Guarrera, 2006(b)
Hypericaceae					
	<i>Hypericum perforatum</i> L.	Flower Flowey plant	Yellow	Carotenoids	Ucria, 1789 Briganti, 1842

					Guarrera, 2006(b) Angelini et al., 2010
Euphorbiaceae					
	<i>Chrozophora tinctoria</i> (L.) A.Juss.	Juice of fruits Flowered bunches	Blue	Indigoidines	Ucria, 1789 Briganti, 1842 Guarrera, 2006(a) Guarrera, 2006(b)
	<i>Mercurialis annua</i> L.	Leaves Stem	Yellow	Carotenoids	Briganti, 1842 Guarrera, 2006(a) Guarrera, 2006(b)
	<i>Mercurialis perennis</i> L.	Grass	Blue	Indigoidines	Briganti, 1842
	<i>Mercurialis corsica</i> Coss. & Kralik	Unknown	Unknown	Unknown	Guarrera, 2006(b)
	<i>Ricinus communis</i> L.	Leaves Spike	Yellow	Carotenoids	Briganti, 1842
	<i>Euphorbia helioscopia</i> L.	Whole plant	Green	Chlorophylls	Briganti, 1842 Türkmen et al., 2004 Guarrera, 2006(b)
	<i>Euphorbia palustris</i> L.	Whole plant	Yellow	Carotenoids	Briganti, 1842 Türkmen et al., 2004 Guarrera, 2006(b)
	<i>Euphorbia cyparissias</i> L.	Whole plant	Green	Chlorophylls	Briganti, 1842 Türkmen et al., 2004 Guarrera, 2006(b)
	<i>Euphorbia characias</i> L.	Whole plant	Yellow	Carotenoids	Guarrera, 2006(a) Guarrera, 2006(b) Caneva et al., 2013
	<i>Euphorbia peplus</i> L.	Whole plant	Yellow	Carotenoids	Briganti, 1842 Türkmen et al., 2004 Guarrera, 2006(b)
Celastraceae					
	<i>Euonymus europaeus</i> L.	Bark Capsule Charred branches	Red Yellow Black	PAHs, Carotenoids, Anthocyanins Carotenoids Anthocyanins, Tannins, PAHs	Briganti, 1842 Maxia et al., 2013
Violaceae					
	<i>Viola odorata</i> L.	Flower	Blue	Indigoidines	Briganti, 1842

					Guarrera, 2006(b)
	<i>Viola tricolor</i> L.	Grass	Yellow	Carotenoids	Briganti, 1842 Guarrera, 2006(b)
Salicaceae					
	<i>Salix alba</i> L.	Debarked wood	Red	PAHs, Carotenoids, Anthocyanins	Briganti, 1842 Guarrera, 2006(a)
		Bark Branches	Yellow	Carotenoids	Guarrera, 2006(b)
	<i>Salix alba</i> subsp. <i>vitellina</i> (L.) Schübl. & Martens	Branches	Yellow	Carotenoids	Briganti, 1842 Guarrera, 2006(b)
	<i>Salix purpurea</i> L.	Bark	Yellow	Carotenoids	Briganti, 1842 Guarrera, 2006(b)
	<i>Salix pentandra</i> L.	Leaves	Yellow	Carotenoids	Ucria, 1789 Briganti, 1842 Guarrera, 2006(b)
	<i>Salix caprea</i> L.	Debarked wood	Red	PAHs, Carotenoids, Anthocyanins	Briganti, 1842 Guarrera, 2006(b)
		Bark Branches Wood	Yellow	Carotenoids	Kakhia, 2015
	<i>Salix atrocinerea</i> Brot.	Leaves	Yellow	Carotenoids	Guarrera, 2006(b)
	<i>Populus alba</i> L.	Young branches	Yellow	Carotenoids	Briganti, 1842 Farina, 1874
	<i>Populus tremula</i> L.	Bark	Yellow	Carotenoids	Briganti, 1842
	<i>Populus nigra</i> L.	Bark	Yellow	Carotenoids	Briganti, 1842 Guarrera, 2006(a) Guarrera, 2006(b) Maxia et al., 2013
Linaceae					
	<i>Linum usitatissimum</i> L.	Soot	Black	Anthocyanins, Tannins, PAHs	Briganti, 1842
Fabaceae					
	<i>Cercis siliquastrum</i> L.	Branches	Yellow	Carotenoids	Briganti, 1842
	<i>Gleditsia triacanthos</i> L.	Young branches Thorns	Red	PAHs, Carotenoids, Anthocyanins	Briganti, 1842
	<i>Vachellia farnesiana</i> (L.) Wight & Arn.	Flower	Yellow	Carotenoids	Briganti, 1842

<i>Anagyris foetida</i> L.	Leaves	Yellow	Carotenoids	Briganti, 1842
<i>Laburnum anagyroides</i> Medik.	Leaves	Green	Clorophylls	Briganti, 1842
<i>Cytisus hirsutus</i> L.	Leaves Branches	Green	Clorophylls	Briganti, 1842
<i>Genista tinctoria</i> L.	Stem Flowery branches	Yellow	Carotenoids	Ucria 1789 Briganti, 1842 Kerry & David, 2001 Guarrera, 2006(a) Angelini et al., 2010 Cardon, 2010 Kakhia, 2015
<i>Genista pilosa</i> L.	Flowery branches	Yellow	Carotenoids	Briganti, 1842
<i>Spartium junceum</i> L.	Young branches	Yellow	Carotenoids	Briganti, 1842 Guarrera, 2006(b)
<i>Ulex europaeus</i> L.	Fresh flower	Yellow	Carotenoids	Briganti, 1842
<i>Indigofera tinctoria</i> L.	Leaves	Blue	Indigotines	Ucria 1789 Briganti, 1842 Kerry & David, 2001 Guarrera, 2006(a) Guarrera, 2006(b) Angelini et al., 2010 Cardon, 2010 Caneva et al., 2013 Kakhia, 2015
<i>Robinia pseudoacacia</i> L.	Dry wood Young branches	Yellow	Carotenoids	Briganti, 1842
<i>Robinia hispida</i> L.	Dry branches Bark	Yellow	Carotenoids	Briganti, 1842
<i>Colutea arborescens</i> L.	Branches	Green	Clorophylls	Briganti, 1842
<i>Amorpha fruticosa</i> L.	Tender shoots Leaves	Blue	Indigoidines	Briganti, 1842
<i>Phaseolus coccineus</i> L.	Flower	Red	PAHs, Carotenoids, Anthocyanins	Briganti, 1842
<i>Lathyrus aphaca</i> L.	Fresh plant	Green	Clorophylls	Briganti, 1842
<i>Ononis natrix</i> L.	Grass	Green	Clorophylls	Briganti, 1842
<i>Ononis spinosa</i> L.	Flowery stem	Yellow	Carotenoids	Briganti, 1842
<i>Trigonella foenum-graecum</i> L.	Grass	Yellow	Carotenoids	Briganti, 1842

<i>Medicago sativa</i> L.	Dry grass	Yellow	Carotenoids	Briganti, 1842
<i>Trifolium pratense</i> L.	Grass	Yellow	Carotenoids	Ucria, 1789
	Flower	Green	Clorophylls	Briganti, 1842
<i>Lotus tenuis</i> Waldst. & Kit.	Dry flower	Blue	Indigoidines	Briganti, 1842
<i>Lotus corniculatus</i> L.	Dry flower	Blue	Indigoidines	Briganti, 1842
<i>Lotus halophilus</i> Boiss. & Spruner	Dry flower	Blue	Indigoidines	Briganti, 1842
<i>Lotus hirsutus</i> (L.) Ser.	Leaves	Yellow	Carotenoids	Briganti, 1842
<i>Anthyllis vulneraria</i> L.	Grass	Yellow	Carotenoids	Ucria, 1789
	Flower	Blue	Indigoidines	Briganti, 1842
<i>Coronilla valentina</i> subsp. <i>glauca</i> (L.) Batt.	Stem	Green	Clorophylls	Briganti, 1842
	Leaves			
<i>Sulla coronaria</i> (L.) Medik.	Fresh flower	Brown	Tannins	Briganti, 1842
Rhamnaceae				
<i>Paliurus spina-christi</i> Mill.	Leaves	Yellow	Carotenoids	Briganti, 1842
	Young branches			
<i>Rhamnus alaternus</i> L.	Leaves	Yellow	Carotenoids	Ucria, 1789
	Young branches			Briganti, 1842
				Atzei, 2003
				Guarrera, 2006(a)
	Ripe berries	Green	Clorophylls	Guarrera, 2006(b)
	Bark	Black	Brown	Maxia et al., 2013
				Caneva et al., 2013
				Guarrera, 1990
<i>Rhamnus infectoria</i> L.	Peel of green berries	Yellow	Carotenoids	Briganti, 1842
	Ripe berries	Green	Clorophylls	Atzei, 2003
				Guarrera, 2006(a)
				Caneva et al., 2013
<i>Rhamnus cathartica</i> L.	Overripe berries	Red	PAHs, Carotenoids, Anthocyanins	Ucria, 1789
	Bark	Yellow	Carotenoids	Briganti, 1842
	Green berries			Tammaro, 1984
	Roots			
	Juice of ripe berries	Green	Clorophylls	Caneva et al., 2013
<i>Frangula alnus</i> Mill. subsp. <i>alnus</i>	Bark	Yellow	Carotenoids	Ucria, 1789
	Berries			Briganti, 1842
	Leaves			
Elaeagnaceae				

	<i>Hippophae rhamnoides</i> L.	Branches	Red	PAHs, Carotenoids, Anthocyanins	Briganti, 1842
	<i>Elaeagnus angustifolia</i> L.	Branches Leaves	Red	PAHs, Carotenoids, Anthocyanins	Briganti, 1842
Ulmaceae					
	<i>Celtis australis</i> L.	Branches Bark Wood	Yellow Brown	Carotenoids Tannins	Briganti, 1842 Guarrera, 2006(b)
	<i>Ulmus minor</i> Mill.	Leaves	Red	PAHs, Carotenoids, Anthocyanins	Guarrera, 2006(b)
Moraceae					
	<i>Broussonetia papyrifera</i> (L.) Vent.	Branches	Yellow	Carotenoids	Briganti, 1842
	<i>Morus nigra</i> L.	Wood	Yellow	Carotenoids	Briganti, 1842 Guarrera, 2006(a) Guarrera, 2006(b) Kakhia, 2015
	<i>Morus alba</i> L.	Wood	Yellow	Carotenoids	Briganti, 1842
Cannabaceae					
	<i>Humulus lupulus</i> L.	Leaves Flowery stem	Red	PAHs, Carotenoids, Anthocyanins	Briganti, 1842
	<i>Cannabis sativa</i> L.	Grass	Yellow	Carotenoids	Briganti, 1842
Urticaceae					
	<i>Urtica dioica</i> L.	Roots	Yellow	Carotenoids	Ucria, 1789 Briganti, 1842 Guarrera, 2006(a) Guarrera, 2006(b) Kakhia, 2015 Caneva et al., 2013
	<i>Parietaria officinalis</i> L.	Leaves Fresh stem	Green	Clorophylls	Briganti, 1842
	<i>Parietaria judaica</i> L.	Unknown	Unknown	Unknown	Guarrera, 2006(b)
Coriariaceae					
	<i>Coriaria myrtifolia</i> L.	Whole plant	Black	Anthocyanins, Tannins, PAHs	Briganti, 1842 Kakhia, 2015
Betulaceae					
	<i>Betula pubescens</i> Ehrh. var. <i>pubescens</i>	Branches Wood	Red	PAHs, Carotenoids, Anthocyanins	Briganti, 1842 Kakhia, 2015

	Bark			
	Leaves	Yellow	Carotenoids	
<i>Alnus glutinosa</i> (L.) Gaertn.	Bark	Red	PAHs, Carotenoids, Anthocyanins	Briganti, 1842 Farina, 1874
	Leaves	Yellow	Carotenoids	Schneider, 1981
	Bark			Curreli & Loddo, 1983
	Young branches			Atzei, 2003
	Bark	Brown	Tannins	Türkmen et al., 2004
	Cones	Black	Anthocyanins, Tannins, PAHs	Caneva et al., 2013 Guarrera, 2006(a) Guarrera, 2006(b) Maxia et al., 2013 Kakhia, 2015
<i>Alnus cordata</i> (Loisel.) Duby	Inner bark	Red	PAHs, Carotenoids, Anthocyanins	Briganti, 1842 Schneider, 1981
	Bark	Yellow	Carotenoids	Curreli & Loddo, 1983
	Cones			Atzei, 2003
	Catkins	Green	Clorophylls	Kakhia, 2015
<i>Corylus avellana</i> L.	Bark	Green	Clorophylls	Briganti, 1842
	Branches			
<i>Carpinus betulus</i> L.	Bark	Yellow	Carotenoids	Briganti, 1842
Fagaceae				
<i>Fagus sylvatica</i> L.	Fresh bark	Yellow	Carotenoids	Briganti, 1842
	Calyxes			
	Branches			
	Charred wood	Black	Anthocyanins, Tannins, PAHs	Caneva et al., 2013
<i>Castanea sativa</i> Mill.	Bark	Brown	Tannins	Briganti, 1842
	Wood			
	Fruit rind			
<i>Quercus suber</i> L.	Charred bark	Black	Anthocyanins, Tannins, PAHs	Briganti, 1842 Schneider, 1981 Curreli & Loddo, 1983 Tammaro, 1984 Atzei, 2003 Türkmen et al., 2004 Guarrera, 2006(b)
	Galls			

					Caneva et al., 2013 Kakhia, 2015
<i>Quercus ilex</i> L.	Galls	Black	Anthocyanins, Tannins, PAHs		Guarrera, 2006(b)
<i>Quercus coccifera</i> L.	Galls	Black	Anthocyanins, Tannins, PAHs		Guarrera, 2006(b)
<i>Quercus congesta</i> C.Presl	Galls	Black	Anthocyanins, Tannins, PAHs		Guarrera, 2006(b)
<i>Quercus pubescens</i> Willd.	Galls	Black	Anthocyanins, Tannins, PAHs		Guarrera, 2006(b)
<i>Quercus robur</i> L.	Bark Branches Exudate Top of acorn Galls	Brown Black	Tannins Anthocyanins, Tannins, PAHs		Ucria, 1789 Briganti, 1842 Schneider, 1981 Curreli & Loddo, 1983 Tammaro, 1984 Atzei, 2003 Türkmen et al., 2004 Angelini et al., 2010 Caneva et al., 2013 Kakhia, 2015
<i>Quercus petraea</i> (Matt.) Liebl.	Bark Branches Exudate Top of acorn Galls	Brown Black	Tannins Anthocyanins, Tannins, PAHs		Briganti, 1842 Schneider, 1981 Curreli & Loddo, 1983 Tammaro, 1984 Atzei, 2003 Türkmen et al., 2004 Angelini et al., 2010 Caneva et al., 2013 Kakhia, 2015
<i>Quercus ithaburensis</i> subsp. <i>macrolepis</i> (Kotschy) Hedge & Yalt.	Bark Branches Exudate Top of acorn Galls	Brown Black	Tannins Anthocyanins, Tannins, PAHs		Ucria, 1789 Caneva et al., 2013
Juglandaceae					
<i>Juglans regia</i> L.	Bark Catkin	Yellow	Carotenoids		Briganti, 1842 Cabiddu, 1965

	Husk Bark of roots Leaves Fruit	Brown	Tannins	Tamaro, 1984 Guarrera, 1990 Özgökçe & Yilmaz, 2003 Dogan et al., 2004 Türkmen et al., 2004 Guarrera, 2006(a) Guarrera, 2006(b) Caneva et al., 2013 Maxia et al., 2013 Kakhia, 2015
Rosaceae				
	<i>Physocarpus opulifolius</i> (L.) Maxim.	Leafless stem	Red	PAHs, Carotenoids, Anthocyanins Briganti, 1842
	<i>Filipendula ulmaria</i> (L.) Maxim.	Leaves Flowery stem	Yellow	Carotenoids Briganti, 1842
	<i>Rubus odoratus</i> L.	Dry stem	Yellow	Carotenoids Briganti, 1842 Guarrera, 2006(b)
	<i>Rosa pendulina</i> L.	Young branches	Yellow	Carotenoids Briganti, 1842 Guarrera, 2006(b)
	<i>Rosa rubiginosa</i> L.	Young branches	Yellow	Carotenoids Briganti, 1842 Guarrera, 2006(b)
	<i>Rosa canina</i> L.	Roots Wood	Yellow	Carotenoids Briganti, 1842 Guarrera, 2006(b)
	<i>Agrimonia eupatoria</i> L.	Leaves Stem	Yellow	Carotenoids Briganti, 1842 Guarrera, 2006(b)
	<i>Amelanchier ovalis</i> Medik	Unknown	Unknown	Unknown Guarrera, 2006(b)
	<i>Sanguisorba officinalis</i> L.	Whole plant	Brown	Tannins Briganti, 1842
	<i>Fragaria vesca</i> L.	Roots Fruits	Red Yellow	PAHs, Carotenoids, Anthocyanins Carotenoids Briganti, 1842
	<i>Potentilla anserina</i> L.	Leaves	Yellow	Carotenoids Briganti, 1842
	<i>Potentilla erecta</i> (L.) Raeusch.	Roots	Red	PAHs, Carotenoids, Anthocyanins Briganti, 1842
	<i>Pyrus communis</i> L.	Bark Wood Dry fruits	Yellow Brown	Carotenoids Tannins Briganti, 1842 Patil et al., 2019

<i>Cydonia oblonga</i> Mill.	Leaves	Yellow	Carotenoids	Briganti, 1842
<i>Malus domestica</i> Borkh.	Bark	Yellow	Carotenoids	Ucria, 1789
	Leaves			Briganti, 1842
	Dry wood	Brown	Tannins	Guarrera, 2006(b)
<i>Sorbus domestica</i> L.	Young branches	Red	PAHs, Carotenoids, Anthocyanins	Briganti, 1842
	Fruits	Brown	Tannins	
<i>Sorbus aucuparia</i> L.	Young branches	Red	PAHs, Carotenoids, Anthocyanins	Briganti, 1842
<i>Pyracantha coccinea</i> M. J. Roemer	Branches	Red	PAHs, Carotenoids, Anthocyanins	Briganti, 1842
<i>Mespilus germanica</i> L.	Bark	Red	PAHs, Carotenoids, Anthocyanins	Briganti, 1842
	Wood			
	Branches			
	Fruits			
<i>Crataegus monogyna</i> Jacq.	Wood	Red	PAHs, Carotenoids, Anthocyanins	Briganti, 1842
<i>Prunus avium</i> (L.) L.	Dry wood	Yellow	Carotenoids	Briganti, 1842
<i>Prunus cerasus</i> L.	Fruits	Red	PAHs, Carotenoids, Anthocyanins	Briganti, 1842
				Guarrera, 2006(b)
<i>Prunus dulcis</i> (Mill.) D.A. Webb	Unknown	Unknown	Unknown	Guarrera, 2006(b)
<i>Prunus mahaleb</i> L.	Young soft branches	Yellow	Carotenoids	Briganti, 1842
				Guarrera, 2006
<i>Prunus persica</i> (L.) Stokes	Young branches	Red	PAHs, Carotenoids, Anthocyanins	Briganti, 1842
	Kernel			Patil et al., 2019
<i>Prunus armeniaca</i> L.	Young branches	Yellow	Carotenoids	Briganti, 1842
<i>Prunus domestica</i> L.	Bark	Yellow	Carotenoids	Briganti, 1842
	Wood			
	Dry fruits			
<i>Prunus laurocerasus</i> L.	Branches	Red	PAHs, Carotenoids, Anthocyanins	Briganti, 1842
	Leaves			
<i>Prunus spinosa</i> L.	Unknown	Unknown	Unknown	Guarrera, 2006(b)
Geraniaceae				
<i>Geranium robertianum</i> L.	Grass	Yellow	Carotenoids	Briganti, 1842
<i>Geranium colombinum</i> L.	Grass	Yellow	Carotenoids	Briganti, 1842
<i>Pelargonium inquinans</i> (L.) L'Hér.	Corolla	Red	PAHs, Carotenoids, Anthocyanins	Briganti, 1842

	<i>Erodium moschatum</i> (L.) L'Hér.	Grass	Yellow	Carotenoids	Briganti, 1842
Lythraceae					
	<i>Lythrum salicaria</i> L.	Flowery stem	Brown	Tannins	Briganti, 1842
	<i>Punica granatum</i> L.	Peel of fruits	Yellow	Carotenoids	Briganti, 1842 Cabiddu, 1965 Curreli & Loddo, 1983 Atzei, 2003 Türkmen et al., 2004 Guarrera, 2006(b) Angelini et al., 2010 Maxia et al., 2013 Kakhia, 2015 Patil et al., 2019
Myrtaceae					
	<i>Myrtus communis</i> L.	Juice of berries Leaves	Brown	Tannins	Briganti, 1842 Cabiddu, 1965 Curreli & Loddo, 1983 Atzei, 2003 Türkmen et al., 2004 Guarrera, 2006(b)
Staphyleaceae					
	<i>Staphylea pinnata</i> L.	Leafy branches	Yellow	Carotenoids	Briganti, 1842
Resedaceae					
	<i>Reseda lutea</i> L.	Whole plant	Yellow	Carotenoids	Guarrera, 2006(b)
	<i>Reseda luteola</i> L.	Whole plant	Yellow	Carotenoids	Ucria, 1789 Briganti, 1842 Kerry & David, 2001 Özgökçe & Yilmaz, 2003 Dogan et al., 2004 Guarrera, 2006(a) Guarrera, 2006(b) Angelini et al., 2010 Cardon, 2010 Caneva et al., 2013 Kakhia, 2015 Angelini, 2016

					Fioretti, 2016
Brassicaceae					
<i>Sisymbrium officinale</i> (L.) Scop.	Spikes	Green	Clorophylls	Briganti, 1842	
<i>Isatis tinctoria</i> L.	Leaves	Blue	Indigoidines	Ucria, 1789 Briganti, 1842 Kerry & David, 2001 Türkmen et al., 2004 Guarrera, 2006(a) Guarrera, 2006(b) Angelini et al., 2010 Idolo et al., 2010 Caneva et al., 2013 Maxia et al., 2013 Kakhia, 2015 Angelini, 2016 Fioretti, 2016	
<i>Erysimum cheiri</i> (L.) Crantz	Leaves Stem	Green	Clorophylls	Briganti, 1842	
<i>Matthiola incana</i> (L.) W.T.Aiton	Leaves Stem	Green	Clorophylls	Briganti, 1842	
<i>Matthiola sinuata</i> (L.) W.T.Aiton	Flower	Red	PAHs, Carotenoids, Anthocyanins	Briganti, 1842	
<i>Barbarea vulgaris</i> (L.) W.T. Aiton	Leaves	Green	Clorophylls	Briganti, 1842	
<i>Capsella bursa-pastoris</i> (L.) Medik.	Plant Seed Leaves	Yellow	Carotenoids	Briganti, 1842	
<i>Thlaspi arvense</i> L.	Green plant Green seed	Green	Clorophylls	Briganti, 1842	
<i>Raphanus sativus</i> L.	Epidermis of the roots	Purple	Anthocyanins	Briganti, 1842	
Thymelaeaceae					
<i>Daphne mezereum</i> L.	Stem	Green	Clorophylls	Briganti, 1842	
<i>Daphne laureola</i> L.	Wood Leaves	Yellow	Carotenoids	Briganti, 1842	
<i>Daphne gnidium</i> L.	Leaves Bark	Yellow	Carotenoids	Briganti, 1842 Cabiddu, 1965 Guarrera, 1990	
	Bark	Green	Clorophylls	Atzei, 2003	

					Guarrera, 2006(a) Guarrera, 2006(b) Maxia et al., 2013
Cistaceae	<i>Helianthemum nummularium</i> (L.) Mill. subsp. <i>nummularium</i>	Root Stem	Brown	Tannins	Briganti, 1842
Malvaceae	<i>Malva arborea</i> (L.) Webb & Berthel.	Stem Leaves	Yellow	Carotenoids	Briganti, 1842
	<i>Alcea rosea</i> L.	Flower	Red	PAHs, Carotenoids, Anthocyanins	Briganti, 1842 Patil et al., 2019
	<i>Hibiscus syriacus</i> L.	Wood	Red	PAHs, Carotenoids, Anthocyanins	Briganti, 1842
	<i>Tilia</i> × <i>europaea</i> L.	Flower Green bark	Purple Red	Anthocyanins PAHs, Carotenoids, Anthocyanins	Briganti, 1842
Rutaceae	<i>Ruta graveolens</i> L.	Leaves Stem	Green	Chlorophylls	Briganti, 1842 Angelini et al., 2010
	<i>Citrus medica</i> L.	Unripe fruits	Yellow	Carotenoids	Briganti, 1842 Patil et al., 2019
	<i>Citrus aurantium</i> L.	Unripe fruits Peel of ripe fruits	Yellow Red	Carotenoids PAHs, Carotenoids, Anthocyanins	Briganti, 1842
Meliaceae	<i>Melia azedarach</i> L.	Branches	Red	PAHs, Carotenoids, Anthocyanins	Briganti, 1842
Anacardiaceae	<i>Rhus coriaria</i> L.	Bark of roots Bark	Red Yellow	PAHs, Carotenoids, Anthocyanins Carotenoids	Briganti, 1842 Tammaro, 1984 Caneva et al., 2013 Türkmen et al., 2004 Guarrera, 2006(b) Idolo et al., 2010 Kakhia, 2015
	<i>Rhus typhina</i> L.	Bark	Yellow	Carotenoids	Briganti, 1842 Kakhia, 2015

<i>Cotinus coggygria</i> Scop.	Bark of roots	Red	PAHs, Carotenoids, Anthocyanins	Briganti, 1842 Kerry & David, 2001 Caneva et al., 2013
	Bark Branches Leaves	Yellow	Carotenoids	Türkmen et al., 2004 Guarrera, 2006(b) Angelini et al., 2010
<i>Pistacia lentiscus</i> L.	Leaves	Red	PAHs, Carotenoids, Anthocyanins	Guarrera, 2006(b)
<i>Pistacia terebinthus</i> L.	Unknown	Unknown	Unknown	Guarrera, 2006(b)
Sapindaceae				
<i>Acer campestre</i> L.	Bark Fresh wood	Red	PAHs, Carotenoids, Anthocyanins	Briganti, 1842 Kakhia, 2015
<i>Acer opalus</i> subsp. <i>obtusatum</i> (Waldst. & Kit. ex Willd.) Gams	Bark	Red	PAHs, Carotenoids, Anthocyanins	Briganti, 1842 Kakhia, 2015
<i>Acer pseudoplatanus</i> L.	Bark	Red	PAHs, Carotenoids, Anthocyanins	Briganti, 1842 Kakhia, 2015
<i>Aesculus hippocastanum</i> L.	Bark Young branches Leaves	Yellow	Carotenoids	Briganti, 1842
<i>Aesculus pavia</i> L.	Bark Young branches Leaves	Yellow	Carotenoids	Briganti, 1842
Cornaceae				
<i>Cornus mas</i> L.	Bark of roots	Yellow	Carotenoids	Briganti, 1842
<i>Cornus sanguinea</i> L.	Branches	Yellow	Carotenoids	Briganti, 1842
	Bark	Green	Chlorophylls	Guarrera, 2006(b)
	Berries	Purple	Anthocyanins	
Balsaminaceae				
<i>Impatiens balsamina</i> L.	Flower	Yellow	Carotenoids	Briganti, 1842 Patil et al., 2019
Ebenaceae				
<i>Diospyros lotus</i> L.	Leaves Branches	Yellow	Carotenoids	Briganti, 1842
Hydrangeaceae				
<i>Philadelphus coronarius</i> L.	Branches	Red	PAHs, Carotenoids, Anthocyanins	Briganti, 1842
Myrsinaceae				

<i>Cyclamen hederifolium</i> Aiton subsp. <i>hederifolium</i>	Tuber	Red	PAHs, Carotenoids, Anthocyanins	Briganti, 1842
<i>Cyclamen purpurascens</i> Mill. subsp. <i>purpurascens</i>	Tuber	Red	PAHs, Carotenoids, Anthocyanins	Briganti, 1842
<i>Cyclamen repandum</i> Sm.	Unknown	Unknown	Unknown	Guarrera, 2006(b)
<i>Lysimachia vulgaris</i> L.	Grass Stem Flower Roots	Yellow	Carotenoids	Ucria, 1789 Briganti, 1842
Ericaceae				
<i>Erica arborea</i> L.	Branches	Red	PAHs, Carotenoids, Anthocyanins	Briganti, 1842 Curreli & Loddo, 1983 Atzei, 2003 Guarrera, 2006(b) Maxia et al., 2013
<i>Calluna vulgaris</i> (L.) Hull	Branches	Red	PAHs, Carotenoids, Anthocyanins	Briganti, 1842
	Whole plant	Yellow	Carotenoids	
<i>Arctostaphylos uva-ursi</i> (L.) Spreng. subsp. <i>uva-ursi</i>	Roots Whole plant Leaves Leaves	Red Grey Black	PAHs, Carotenoids, Anthocyanins PAHs, Tannins Anthocyanins, Tannins, PAHs	Ucria, 1789 Briganti, 1842 Guarrera, 2006(a)
<i>Vaccinium myrtillus</i> L.	Berries	Purple	Anthocyanins	Briganti, 1842 Guarrera, 2006(b)
Rubiaceae				
<i>Crucianella latifolia</i> L.	Roots	Red	PAHs, Carotenoids, Anthocyanins	Briganti, 1842
<i>Asperula tinctoria</i> L.	Roots	Red	PAHs, Carotenoids, Anthocyanins	Ucria, 1789 Briganti, 1842
<i>Asperula cynanchica</i> L.	Roots	Red	PAHs, Carotenoids, Anthocyanins	Briganti, 1842
<i>Asperula purpurea</i> (L.) Ehrend.	Roots	Red	PAHs, Carotenoids, Anthocyanins	Briganti, 1842
<i>Asperula taurina</i> L.	Roots	Red	PAHs, Carotenoids, Anthocyanins	Briganti, 1842

<i>Asperula laevigata</i> L.	Roots	Red	PAHs, Carotenoids, Anthocyanins	Briganti, 1842
<i>Asperula arvensis</i> L.	Roots	Red	PAHs, Carotenoids, Anthocyanins	Briganti, 1842
<i>Galium boreale</i> L.	Roots	Red	PAHs, Carotenoids, Anthocyanins	Briganti, 1842
<i>Galium verum</i> L.	Roots	Red	PAHs, Carotenoids, Anthocyanins	Briganti, 1842
	Flowery grass Spike	Yellow	Carotenoids	Kerry & David, 2001 Türkmen et al., 2004 Guarrera, 2006(b) Angelini et al., 2010
<i>Galium sylvaticum</i> L.	Roots	Red	PAHs, Carotenoids, Anthocyanins	Briganti, 1842
<i>Galium mollugo</i> L.	Roots	Red	PAHs, Carotenoids, Anthocyanins	Briganti, 1842
	Leaves Stem	Yellow	Carotenoids	Kerry & David, 2001
<i>Galium aparine</i> L.	Roots	Red	PAHs, Carotenoids, Anthocyanins	Briganti, 1842 Kerry & David, 2001
<i>Cruciata laevipes</i> Opiz	Roots	Red	PAHs, Carotenoids, Anthocyanins	Briganti, 1842
<i>Rubia peregrina</i> L.	Roots	Red	PAHs, Carotenoids, Anthocyanins	Briganti, 1842 Guarrera, 1990 Guarrera, 2006(a) Guarrera, 2006(b) Maxia et al., 2013 Kakhia, 2015
<i>Rubia tinctorum</i> L.	Roots	Red	PAHs, Carotenoids, Anthocyanins	Ucria, 1789 Briganti, 1842 Farina, 1874 Cabiddu, 1965 Zanoni & Schofield, 1983 Kerry & David, 2001 Özgökçe & Yilmaz, 2003 Dogan et al., 2004

					Türkmen et al., 2004 Guarrera, 2006(a) Guarrera, 2006(b) Angelini et al., 2010 Idolo et al., 2010 Caneva et al., 2013 Maxia et al., 2013 Kakhia, 2015 Angelini, 2016
Apocynaceae					
	<i>Nerium oleander</i> L.	Branches Leaves	Yellow	Carotenoids	Briganti, 1842
	<i>Vinca major</i> L.	Stem Leaves	Yellow	Carotenoids	Briganti, 1842
	<i>Periploca graeca</i> L.	Whole plant	Brown	Tannins	Briganti, 1842
	<i>Asclepias syriaca</i> L.	Stem Leaves	Green	Chlorophylls	Briganti, 1842
	<i>Vincetoxicum hirundinaria</i> Medik. s.l. subsp. <i>hirundinaria</i>	Stem Leaves	Green	Chlorophylls	Briganti, 1842
Boraginaceae					
	<i>Buglossoides arvensis</i> (L.) I.M.Johnst.	Roots	Red	PAHs, Carotenoids, Anthocyanins	Briganti, 1842
	<i>Alkanna tinctoria</i> Tausch subsp. <i>tinctoria</i>	Roots Leaves	Red Yellow	PAHs, Carotenoids, Anthocyanins Carotenoids	Ucria, 1789 Briganti, 1842 Cabiddu, 1965 Kerry & David, 2001 Guarrera, 2006(a) Guarrera, 2006(b) Caneva et al., 2013 Maxia et al., 2013 Kakhia, 2015
	<i>Echium vulgare</i> L.	Roots Leaves Stem	Grey Green	PAHs, Tannins Chlorophylls	Briganti, 1842
	<i>Symphytum officinale</i> L.	Grass	Black	Anthocyanins, Tannins, PAHs	Briganti, 1842

<i>Anchusa ochroleuca</i> M. Bieb.	Roots	Red	PAHs, Carotenoids, Anthocyanins	Briganti, 1842
	Leaves Flower	Green Blue	Chlorophylls Indigoidines	
<i>Lycopsis arvensis</i> L.	Fresh grass Flower	Yellow	Carotenoids	Briganti, 1842
<i>Borago officinalis</i> L.	Leaves	Yellow	Carotenoids	Briganti, 1842
	Flowery stem			Guarrera, 2006(b)
Oleaceae				
<i>Chrysojasminum fruticans</i> (L.) Banfi	Young branches	Yellow	Carotenoids	Ucria, 1789
<i>Jasminum officinale</i> L.	Young branches	Yellow	Carotenoids	Briganti, 1842
<i>Fraxinus ornus</i> L.	Leaves	Yellow	Carotenoids	Briganti, 1842 Türkmen et al., 2004 Guarrera, 2006(a) Guarrera, 2006(b)
		Green	Chlorophylls	Idolo et al., 2010 Caneva et al., 2013
<i>Fraxinus excelsior</i> L.	Fresh wood	Yellow	Carotenoids	Briganti, 1842
	Bark	Blue	Indigoidines	Guarrera, 2006(a)
<i>Syringa vulgaris</i> L.	Branches	Yellow	Carotenoids	Briganti, 1842
<i>Ligustrum vulgare</i> L.	Bark	Yellow	Carotenoids	Ucria, 1789
	Berries	Red	PAHs, Carotenoids, Anthocyanins	Briganti, 1842 Guarrera, 2006(b)
<i>Olea europaea</i> L.	Young soft branches	Yellow	Carotenoids	Briganti, 1842
	Leaves			Guarrera, 2006(b)
<i>Phillyrea angustifolia</i> L.	Branches	Yellow	Carotenoids	Guarrera, 2006(b)
	Leaves			
<i>Phillyrea latifolia</i> L.	Branches	Yellow	Carotenoids	Briganti, 1842
	Leaves			Guarrera, 2006(b) Maxia et al., 2013
Verbenaceae				
<i>Verbena officinalis</i> L.	Flowery stem	Yellow	Carotenoids	Briganti, 1842
Lamiaceae				
<i>Marrubium vulgare</i> L.	Stem	Yellow	Carotenoids	Briganti, 1842
	Flower			Guarrera, 2006(b)
<i>Galeopsis ladanum</i> L.	Flowery grass	Red	PAHs, Carotenoids, Anthocyanins	Briganti, 1842

<i>Galeopsis tetrahit</i> L.	Flowery grass	Red	PAHs, Carotenoids, Anthocyanins	Briganti, 1842
<i>Lamium purpureum</i> L.	Flowery stem	Green	Clorophylls	Briganti, 1842
<i>Ballota nigra</i> L.	Stem Flower	Green	Clorophylls	Briganti, 1842
<i>Stachys sylvatica</i> L.	Grass	Yellow	Carotenoids	Ucria, 1789 Briganti, 1842
<i>Betonica officinalis</i> L.	Leaves Flowery stem	Yellow	Carotenoids	Briganti, 1842
<i>Prunella vulgaris</i> L.	Flowery plant	Green	Clorophylls	Briganti, 1842
<i>Melissa officinalis</i> L.	Leaves	Green	Clorophylls	Briganti, 1842 Türkmen et al., 2004
<i>Satureja hortensis</i> L.	Flowery stem	Green	Clorophylls	Briganti, 1842
<i>Clinopodium acinos</i> (L.) Kuntze	Stem Leaves	Green	Clorophylls	Briganti, 1842
<i>Clinopodium nepeta</i> (L.) Kuntze	Unknown	Unknown	Unknown	Guarrera, 2006(b)
<i>Clinopodium vulgare</i> L.	Leaves Flowery stem	Yellow	Carotenoids	Briganti, 1842
<i>Origanum vulgare</i> L.	Top of flowering plant	Brown	Tannins	Briganti, 1842 Guarrera, 2006(b)
<i>Thymus vulgaris</i> L.	Stem Leaves	Green	Clorophylls	Briganti, 1842
<i>Lycopus europaeus</i> L.	Stem Leaves Flower Sap Grass	Yellow Black	Carotenoids Anthocyanins, Tannins, PAHs	Ucria, 1789 Briganti, 1842
<i>Mentha aquatica</i> L.	Stem Leaves	Green	Clorophylls	Briganti, 1842
<i>Rosmarinus officinalis</i> L.	Branches Leaves	Yellow	Carotenoids	Briganti, 1842 Curreli & Loddo, 1983 Atzei, 2003 Guarrera, 2006(b)
<i>Lavandula angustifolia</i> Mill.	Stem Branches	Brown	Tannins	Briganti, 1842
<i>Lavandula angustifolia</i> subsp. <i>pyrenaica</i> (DC.) Guinea	Stem Branches	Brown	Tannins	Briganti, 1842

	<i>Salvia officinalis</i> L.	Stump Woody stem	Yellow	Carotenoids	Briganti, 1842
	<i>Vitex agnus-castus</i> L.	Young branches	Green	Chlorophylls	Briganti, 1842
Scrophulariaceae					
	<i>Verbascum phlomoides</i> L.	Leaves Stem Flower	Yellow	Carotenoids	Briganti, 1842
	<i>Verbascum thapsus</i> L.	Unknown	Unknown	Unknown	Guarrera, 2006(b)
	<i>Scrophularia nodosa</i> L.	Leaves Stem	Yellow	Carotenoids	Briganti, 1842
Orobanchaceae					
	<i>Melampyrum nemorosum</i> L.	Flowery whole plant	Green	Chlorophylls	Briganti, 1842
	<i>Melampyrum pratense</i> L.	Whole plant	Yellow	Carotenoids	Briganti, 1842
	<i>Euphrasia officinalis</i> L.	Grass Green capsule	Brown	Tannins	Briganti, 1842
Plantaginaceae					
	<i>Antirrhinum majus</i> L.	Stem Flower	Yellow	Carotenoids	Briganti, 1842
	<i>Misopates orontium</i> (L.) Raf. subsp. <i>orontium</i>	Fruited plant	Yellow	Carotenoids	Briganti, 1842
	<i>Linaria vulgaris</i> Mill. subsp. <i>vulgaris</i>	Stem Flower	Yellow	Carotenoids	Briganti, 1842 Guarrera, 2006(a) Guarrera, 2006(b)
	<i>Veronica officinalis</i> L.	Dry plant	Green	Chlorophylls	Briganti, 1842
	<i>Veronica serpyllifolia</i> L.	Flowery plant	Yellow	Carotenoids	Briganti, 1842
	<i>Veronica chamaedrys</i> L.	Flowery plant	Yellow	Carotenoids	Briganti, 1842
	<i>Veronica hederifolia</i> L.	Flowery plant	Yellow	Carotenoids	Briganti, 1842
	<i>Plantago lanceolata</i> L.	Leaves	Green	Chlorophylls	Briganti, 1842
Bignoniaceae					
	<i>Campsis radicans</i> (L.) Bureau	Branches	Red	PAHs, Carotenoids, Anthocyanins	Briganti, 1842
	<i>Catalpa bignonioides</i> Walter	Branches	Red	PAHs, Carotenoids, Anthocyanins	Briganti, 1842
Acanthaceae					
	<i>Acanthus mollis</i> L.	Grass	Yellow	Carotenoids	Ucria, 1789 Briganti, 1842

					Guarrera, 2006(b)
Lentibulariaceae					
	<i>Pinguicula vulgaris</i> L.	Juice of leaves	Red	PAHs, Carotenoids, Anthocyanins	Briganti, 1842
Convolvulaceae					
	<i>Cuscuta europaea</i> L.	Whole plant Sap	Red	PAHs, Carotenoids, Anthocyanins	Ucria, 1789 Briganti, 1842
	<i>Cuscuta epithimum</i> (L.) L.	Whole plant	Red	PAHs, Carotenoids, Anthocyanins	Briganti, 1842
	<i>Convolvulus sepium</i> L.	Roots	Red	PAHs, Carotenoids, Anthocyanins	Briganti, 1842
	<i>Convolvulus arvensis</i> L.	Stem Leaves Flower	Brown	Tannins	Briganti, 1842
Solanaceae					
	<i>Atropa belladonna</i> L.	Berries	Green	Chlorophylls	Briganti, 1842
	<i>Physalis alkekengi</i> L.	Calyxes Juice of berries	Red	PAHs, Carotenoids, Anthocyanins	Briganti, 1842
	<i>Solanum tuberosum</i> L.	Green leaves Flowery stem	Yellow	Carotenoids	Briganti, 1842
	<i>Solanum lycopersicum</i> L.	Leaves Stem	Yellow Green	Carotenoids Chlorophylls	Briganti, 1842 Guarrera, 2006(a) Guarrera, 2006(b)
	<i>Solanum nigrum</i> L.	Unknown	Unknown	Unknown	Guarrera, 2006(b)
	<i>Solanum dulcamara</i> L.	Leaves Flowery stem	Grey	PAHs, Tannins	Briganti, 1842
	<i>Capsicum annuum</i> L.	Stem Leaves Fruit	Yellow	Carotenoids	Briganti, 1842 Guarrera, 2006(a) Guarrera, 2006(b) Patil et al., 2019
	<i>Nicotiana tabacum</i> L.	Green leaves Yellowed leaves	Yellow Brown	Carotenoids Tannins	Briganti, 1842 Patil et al., 2019
Gentianaceae					
	<i>Centaurium erythraea</i> Rafn	Flower	Yellow	Carotenoids	Guarrera, 2006(b) Caneva et al., 2013
Aquifoliaceae					
	<i>Ilex aquifolium</i> L.	Leaves	Yellow	Carotenoids	Briganti, 1842

		Young branches			
Araliaceae					
<i>Hedera helix</i> L.	Leaves	Black	Anthocyanins, Tannins, PAHs	Briganti, 1842 Curreli & Loddo, 1983	
	Sap	Brown	Tannins	Atzei, 2003 Guarrera, 2006(a) Guarrera, 2006(b) Maxia et al., 2013	
Apiaceae					
<i>Eryngium campestre</i> L.	Leaves Stem Shoots Seed	Yellow	Carotenoids	Briganti, 1842	
<i>Anthriscus sylvestris</i> (L.) Hoffm.	Leaves Green stem	Yellow	Carotenoids	Briganti, 1842	
<i>Anthriscus cerefolium</i> (L.) Hoffm.	Umbels Grass	Yellow Green	Carotenoids Clorophylls	Briganti, 1842	
<i>Scandix pecten-veneris</i> L.	Grass Seed	Yellow	Carotenoids	Briganti, 1842 Guarrera, 2006(b)	
<i>Myrrhis odorata</i> (L.) Scop.	Leaves Green stem	Yellow	Carotenoids	Briganti, 1842	
<i>Sium latifolium</i> L.	Leaves Flowery stem	Grey	PAHs, Tannins	Briganti, 1842	
<i>Seseli libanotis</i> (L.) W.D.J. Koch subsp. <i>libanotis</i>	Fresh plant	Yellow	Carotenoids	Briganti, 1842	
<i>Oenanthe pimpinelloides</i> L.	Yellowed stem	Green	Clorophylls	Briganti, 1842	
<i>Foeniculum vulgare</i> Mill.	Flowery stem	Yellow	Carotenoids	Briganti, 1842	
<i>Angelica sylvestris</i> L.	Roots Leaves Stem	Yellow	Carotenoids	Briganti, 1842 Kakhia, 2015	
<i>Angelica archangelica</i> L.	Leaves	Yellow	Carotenoids	Briganti, 1842	
<i>Ferula communis</i> L.	Flower	Yellow	Carotenoids	Briganti, 1842 Guarrera, 2006(b) Maxia et al., 2013	
<i>Thapsia asclepium</i> L.	Umbels	Yellow	Carotenoids	Ucria, 1789 Briganti, 1842 Guarrera, 2006(b)	

<i>Thapsia garganica</i> L.	Leaves Umbels	Green Yellow	Clorophylls Carotenoids	Briganti, 1842 Guarrera, 2006(b)
<i>Daucus carota</i> L.	Sterile flower	Red	PAHs, Carotenoids, Anthocyanins	Briganti, 1842 Angelini et al., 2010
	Leaves Stem	Green	Clorophylls	
<i>Daucus carota</i> subsp. <i>maximus</i> (Desf.) Ball	Pistils	Blue	Indigoidines	Briganti, 1842
Caprifoliaceae				
<i>Lonicera alpigena</i> L.	Young branches	Yellow	Carotenoids	Briganti, 1842
<i>Lonicera caprifolium</i> L.	Young stem	Yellow	Carotenoids	Briganti, 1842
<i>Lonicera periclymenum</i> L.	Young stem	Yellow	Carotenoids	Briganti, 1842
<i>Succisa pratensis</i> Moench	Roots	Yellow	Carotenoids	Ucria, 1789
<i>Sixalix atropurpurea</i> (L.) W.Greuter & Burdet	Whole plant	Green	Clorophylls	Guarrera, 2006(b)
Campanulaceae				
<i>Campanula pyramidalis</i> L.	Flowery stem	Yellow	Carotenoids	Briganti, 1842
<i>Campanula rotundifolia</i> L.	Flowery stem Leaves Flower	Green Blue	Clorophylls Indigoidines	Ucria, 1789 Briganti, 1842
Menyanthaceae				
<i>Menyanthes trifoliata</i> L.	Grass	Yellow	Carotenoids	Briganti, 1842
Asteraceae				
<i>Eupatorium cannabinum</i> L.	Flowery plant	Red	PAHs, Carotenoids, Anthocyanins	Briganti, 1842 Guarrera, 2006(b)
<i>Solidago virgaurea</i> L.	Leaves Flowery stem	Yellow	Carotenoids	Briganti, 1842 Kerry & David, 2001 Angelini et al., 2010 Cardon, 2010 Fioretti, 2016
<i>Solidago canadensis</i> L.	Stem Leaves Flower	Yellow	Carotenoids	Briganti, 1842 Kerry & David, 2001 Angelini et al., 2010
<i>Aster amellus</i> L.	Stem Dry flower	Yellow	Carotenoids	Briganti, 1842
<i>Callistephus chinensis</i> (L.) Nees	Leaves Stem	Yellow	Carotenoids	Briganti, 1842

<i>Inula helenium</i> L.	Roots	Blue	Indigoidines	Briganti, 1842
<i>Bidens tripartita</i> L.	Leaves Stem	Yellow	Carotenoids	Ucria, 1789 Briganti, 1842
<i>Helianthus annuus</i> L.	Flower	Yellow	Carotenoids	Briganti, 1842 Patil et al., 2019
<i>Xanthium strumarium</i> L.	Young branches Grass Fruit Seeds	Red Yellow	PAHs, Carotenoids, Anthocyanins	Ucria, 1789 Briganti, 1842
<i>Tagetes erecta</i> L.	Fresh flower Leaves Flowery stem	Yellow	Carotenoids	Briganti, 1842 Patil et al., 2019
<i>Artemisia vulgaris</i> L.	Stem	Yellow	Carotenoids	Briganti, 1842
<i>Artemisia absinthium</i> L.	Pulverized dry stem	Yellow	Carotenoids	Briganti, 1842
<i>Artemisia dracunculus</i> L.	Woody stem	Yellow	Carotenoids	Briganti, 1842
<i>Matricaria chamomilla</i> L.	Flower	Yellow	Carotenoids	Briganti, 1842 Guarrera, 2006(a) Guarrera, 2006(b) Caneva et al., 2013
<i>Anthemis cotula</i> L.	Leaves Stem	Yellow	Carotenoids	Briganti, 1842
<i>Cota tinctoria</i> (L.) J. Gay subsp. <i>tinctoria</i>	Grass Flower	Yellow	Carotenoids	Ucria, 1789 Briganti, 1842 Guarrera, 2006(b) Caneva et al., 2013 Kakhia, 2015
<i>Tanacetum vulgare</i> L.	Leaves Flowery stem	Yellow	Carotenoids	Briganti, 1842 Kakhia, 2015
<i>Glebionis coronaria</i> (L.) N.N.Tzvel.	Whole plant	Yellow	Carotenoids	Guarrera, 2006(b)
<i>Glebionis segetum</i> (L.) Fourr.	Whole plant	Yellow	Carotenoids	Briganti, 1842
<i>Arnica montana</i> L.	Leaves	Yellow	Carotenoids	Briganti, 1842
<i>Jacobaea paludosa</i> (L.) G.Gaertn., B.Mey. & Scherb.	Flowery stem	Yellow	Carotenoids	Briganti, 1842
<i>Jacobaea vulgaris</i> Gaertn.	Leaves Flowery stem	Green	Clorophylls	Ucria, 1789 Briganti, 1842
<i>Calendula officinalis</i> L.	Petals	Yellow	Carotenoids	Briganti, 1842

	Flowery grass			Guarrera, 2006(b)
<i>Calendula arvensis</i> L.	Petals	Yellow	Carotenoids	Briganti, 1842
	Flowery grass			Guarrera, 2006(a)
				Guarrera, 2006(b)
<i>Arctium lappa</i> L.	Roots	Yellow	Carotenoids	Briganti, 1842
	Leaves			
<i>Cynara cardunculus</i> L.	Leaves	Green	Clorophylls	Guarrera, 2006(b)
				Caneva et al., 2013
<i>Cynara scolymus</i> L.	Leaves	Yellow	Carotenoids	Briganti, 1842
				Guarrera, 2006(b)
<i>Serratula tinctoria</i> L.	Stem	Yellow	Carotenoids	Briganti, 1842
	Dry leaves			Cardon, 2010
	Flower			
<i>Centaurea cyanus</i> L.	Flower	Blue	Indigoidines	Ucria, 1789
				Briganti, 1842
<i>Centaurea jacea</i> L.	Grass	Yellow	Carotenoids	Briganti, 1842
<i>Centaurea nigra</i> L.	Leaves	Green	Clorophylls	Briganti, 1842
	Stem			
<i>Centaurea benedicta</i> (L.) L.	Leaves	Yellow	Carotenoids	Briganti, 1842
<i>Centaurea solstitialis</i> L.	Leaves	Yellow	Carotenoids	Briganti, 1842
<i>Carthamus tinctorius</i> L.	Flower	Red	PAHs, Carotenoids, Anthocyanins	Ucria, 1789
	Stamens	Yellow	Carotenoids	Briganti, 1842
				Zanoni & Schofield, 1983
				Kerry & David, 2001
				Guarrera, 2006(a)
				Guarrera, 2006(b)
				Angelini et al., 2010
				Caneva et al., 2013
				Kakhia, 2015
				Patil et al., 2019
<i>Carthamus lanatus</i> L.	Flower	Yellow	Carotenoids	Briganti, 1842
				Guarrera, 2006(b)
<i>Cichorium intybus</i> L.	Grass	Green	Clorophylls	Briganti, 1842
<i>Scorzonera hispanica</i> L.	Roots	Grey	PAHs, Tannins	Briganti, 1842
<i>Chondrilla juncea</i> L.	Stem	Yellow	Carotenoids	Briganti, 1842
	Flower			

<i>Sonchus oleraceus</i> L.	Leaves Flowery stem	Yellow	Carotenoids	Briganti, 1842
<i>Hieracium umbellatum</i> L.	Grass	Yellow	Carotenoids	Ucria 1789 Briganti, 1842
Adoxaceae				
<i>Sambucus ebulus</i> L.	Ripe berries	Purple	Anthocyanins	Briganti, 1842 Guarrera, 2006(b)
<i>Sambucus nigra</i> L.	Bark Branches Dry flowers Ripe berries Wood Seed	Yellow Purple Brown Black	Carotenoids Anthocyanins Tannins Anthocyanins, Tannins, PAHs	Briganti, 1842 Guarrera, 2006(b)
<i>Sambucus racemosa</i> L.	Leafy branches	Yellow	Carotenoids	Briganti, 1842
<i>Viburnum lantana</i> L.	Ripe berries	Black	Anthocyanins, Tannins, PAHs	Briganti, 1842
<i>Viburnum opulus</i> L.	Ripe berries Green branches	Red	PAHs, Carotenoids, Anthocyanins	Briganti, 1842
<i>Viburnum tinus</i> L.	Green branches	Red	PAHs, Carotenoids, Anthocyanins	Briganti, 1842 Guarrera, 2006(b)
Dipsacaceae				
<i>Dipsacus fullonum</i> L.	Roots	Grey	PAHs, Tannins	Briganti, 1842
<i>Knautia arvensis</i> (L.) Coult.	Leaves Dry flower	Yellow	Carotenoids	Briganti, 1842