

SOME WILD PLANTS IN THE CIRENCESTER NATURAL FLORA

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ABSTRACT: This study was carried out to survey wild flora (on herbaceous plants and some shrubs) around the town of Cirencester in the summer of 2013. The purpose of the study was to categorise wild species and provide a review of the most frequent plants available based on their role in the human environment. In the survey, 32 families, 96 genera and a total of 126 species were identified. According to number of genus, the top 5 families were *Asteraceae* 20 genus (21.5%), *Poaceae* 13 (14.0%), *Fabaceae* 8 (8.6%), *Apiaceae*, *Lamiaceae*, *Polygonaceae* and *Rosaceae* 4 (4.3%) and *Brassicaceae* and *Plantaginaceae* 3 (3.2%). According to number of species, top 5 families were *Asteraceae* 27 (21.4%), *Poaceae* 17 (13.5%), *Fabaceae* 12 (9.5%), *Lamiaceae* 7 (5.6%) and *Polygonaceae* 6 (4.8%). Genera were ranked according to number of species: *Cirsium* and *Trifolium* 4; *Sonchus*, *Lamium*, *Poa* and *Rumex* 3; *Chenopodium*, *Matricaria*, *Senecio*, *Sinapis*, *Vicia*, *Stachys*, *Malva*, *Fumaria*, *Plantago*, *Veronica*, *Alopecurus*, *Festuca*, *Lolium* and *Urtica* 2, and other genera have 1 species. Grouped according to their status 105 least concern plants, 9 rare and scarce plants, 4 vulnerable plants, 1 endemic plant and 1 near threatened plant were determined. According to life-style, the survey determined that among all of the identified taxa there were 66 perennial, 42 annual, 6 biennial, 5 annual-biennial, 5 biennial-perennial and 2 annual-biennial-perennial. Ranking species in terms of purpose and status identified 103 weeds, 64 medicinal plants, 55 poisonous plant, 28 invasive plants, 26 forage crops and 9 ornamental plants.

Keywords: Wild plants, natural flora, Cirencester, England

CIRENCESTER DOĞAL FLORASINDA BULUNAN BAZI YABANI BİTKİLER

ÖZET: Bu çalışma, 2013 yazında Cirencester kasabası doğal florasındaki otsu bitkiler ve bazı çalılar üzerinde gerçekleştirilmiştir. Çalışmanın amacı, doğal bitki türlerini sınıflayarak insan yaşamındaki rollerini belirlemektir. Araştırmada 32 aileye, 96 cins olmak üzere 126 takson belirlenmiştir. Cins sayılarına göre ilk beş aileye; *Asteraceae* 20 (%21.5), *Poaceae* 13 (%14.0), *Fabaceae* 8 (%8.6), *Apiaceae*, *Lamiaceae*, *Polygonaceae* ve *Rosaceae* 4 (%4.3), *Brassicaceae* ve *Plantaginaceae* 3 (%3.2)'den oluşmuştur. Tür sayılarına göre ilk beş aileye; *Asteraceae* 27 (%21.4), *Poaceae* 17 (%13.5), *Fabaceae* 12 (%9.5), *Lamiaceae* 7 (%5.6) ve *Polygonaceae* 6 (%4.8)'den oluşmuştur. Cinsler tür sayısına göre sıralandığında; *Cirsium* ve *Trifolium* 4; *Sonchus*, *Lamium*, *Poa* ve *Rumex* 3; *Chenopodium*, *Matricaria*, *Senecio*, *Sinapis*, *Vicia*, *Stachys*, *Malva*, *Fumaria*, *Plantago*, *Veronica*, *Alopecurus*, *Festuca*, *Lolium* ve *Urtica* 2, diğer cinsler ise 1 türe sahiptir. Durumlarına göre sınıflandırıldığında; 105 adet en az endişe verici bitkiler, 9 nadir ve seyrek bitkiler, 4 zarar görebilir durumdaki bitkiler, 1 endemik ve 1 yakın tehdit altında bitki olarak belirlenmiştir. Araştırmada, yaşam formlarına göre incelenen taksonlar arasında 66 çok yıllık, 42 tek yıllık, 6 iki yıllık, 5 tek yıllık-iki yıllık ve 2 tek yıllık-iki yıllık-çok yıllık bitkiler olduğu saptanmıştır. Kullanım amacı ve durumlarına göre; 103 yabancı ot, 64 tıbbi bitki, 55 zehirli bitki, 28 istilacı bitki, 26 yem bitkisi ve 9 süs bitkisi türü belirlenmiştir.

Anahtar Sözcükler: Yabani bitkiler, doğal flora, Cirencester, İngiltere

1. INTRODUCTION

Biological diversity is one of the country's most important natural treasures and is of great importance thereof maintaining the transfer of the next generations. Nowadays 413 genera and 1955 species are reported to be in the UK as a plant (Maxted et al., 2007). Cheffings et al. (2005) emphasized numbers of taxa by The International Union for Conservation of Nature (IUCN), 9 Extinct, 4 Extinct in the Wild, 35 Critically Endangered, 90 Endangered, 220

Vulnerable, 39 Data Deficient, Near Threatened 98 and Least Concern 1261 as a total 1756 in Britain.

Quinn (2009) conducted study on herbaceous and shrubs in the South West region; identified 69 families, 263 genera and 756 species in Bristol. Families, according to percentage of species, determined such as *Asteraceae* (6.7%), *Poaceae* (6.2%), *Brassicaceae* (3.6%), *Fabaceae* (3.2%) and *Rosaceae* 22 (2.9%). Anonymous (2010) reported 15 families, 30 genera and 33 species in Cirencester, *Rosaceae* (21.2%), *Poaceae* (15.2%), *Asteraceae*

(12.1%), *Fabaceae* (9.1%) and *Apiaceae*, *Lamiaceae* and *Rubiaceae* (6.1%). Rutter (2011) stated 29 families, 80 genera and 110 species in Gloucestershire. Families, in terms of species, recognized such as *Asteraceae* and *Poaceae* (15.5%), *Fabaceae* and *Plantaginaceae* (6.4%), *Araliaceae*, *Brassicaceae*, *Lamiaceae* and *Ranunculaceae* (4.5%), *Caryophyllaceae* and *Onagraceae* (3.6%), *Apiaceae*, *Polygonaceae* and *Violaceae* (2.7%). Pilkington (2012) pointed 55 families, 174 genera and 267 species in Wiltshire, and *Cyperaceae* (8.6%), *Asteraceae* (7.1%), *Fabaceae* (6.4%), *Orchidaceae* and *Poaceae* (6.0%) and *Caryophyllaceae* (5.6%), respectively. Anonymous (2013 b) identified 55 families, 145 genera and 189 species in Gloucestershire. Families, according to rate of species, determined such as *Poaceae* (20.1%), *Asteraceae* (10.1%), *Rosaceae* 22 (6.3%), *Fabaceae* (5.3%), *Lamiaceae* and *Cyperaceae* (4.8%), respectively.

Furthermore, some species were found in our study such as *Achillea millefolium*, *Alopecurus myosuroides*, *Angelica sylvestris*, *Bellis perennis*, *Chenopodium album*, *Cirsium vulgare*, *Dactylis glomerata*, *Dipascus fullonum*, *Fallopia convolvulus*, *Festuca rubra*, *Galium aparine*, *Geranium robertianum*, *Hedera helix*, *Heracleum sphondylium*, *Holcus lanatus*, *Lamium purpureum*, *Lolium perenne*, *Malva sylvestris*, *Medicago lupulina*, *Myosotis arvensis*, *Onobrychis vicifolia*, *Papaver rhoeas*, *Plantago lanceolata*, *Poa annua*, *Poa trivialis*, *Polygonum aviculare*, *Ranunculus repens*, *Rosa canina*, *Rubus fruticosus* agg., *Senecio vulgaris*, *Sinapis arvensis*, *Stellaria media*, *Trifolium pratense*, *Trifolium repens*, *Urtica dioica*, *Urtica urens*, *Veronica hederifolia* and *Veronica persica* identified at previous studies in Cirencester (Anonymous, 2010; Cosser, 1996; Sawyer, 2006).

The purpose of this review was to catalogue wild flora in the Cirencester, Gloucestershire, England, urban and periurban areas, to identify plant genetic resources and to support further studies such as agricultural, biological or more generally, environmental surveys.

2. MATERIAL AND METHODS

This flora survey was conducted in Cirencester, Gloucestershire, England, from mid-June until the end of August 2013. The climate of the site was warm and moderately dries (annual rainfall 823mm). The soil geology is of the Jurassic oolitic limestones of the Cotswold range. Soils vary in depth and texture over the limestone, they are typically prone to summer drought, but have high fertility (Anonymous, 2013).

The area covered by the survey included urban and peri-urban areas, with approximately distance between locations of 1 km. Geographical coordinates and elevation of each survey location were registered (Figure 1). Photographs were taken at different distances from each of the plants in a location. The

study of herbaceous plants and some shrubs are usually taken into account. Taxonomy of the plant species photographed was identified using the works of Sikula and Stolfa (1979), Hanf (1983), Stary and Berger, (1983), Cooper and Johnson (1984), Woodward (1985), Press et al. (1989), Fitter et al. (1974), Fitter et al. (1992), Donaldson and Bowers (1998), Bruneton (1999), Pryce (2002), Rose (2006), Sterry (2006), Clarke et al. (2007), Lym and Travnicek (2012), Bauder (2013), Flagstad and Burns (2013).

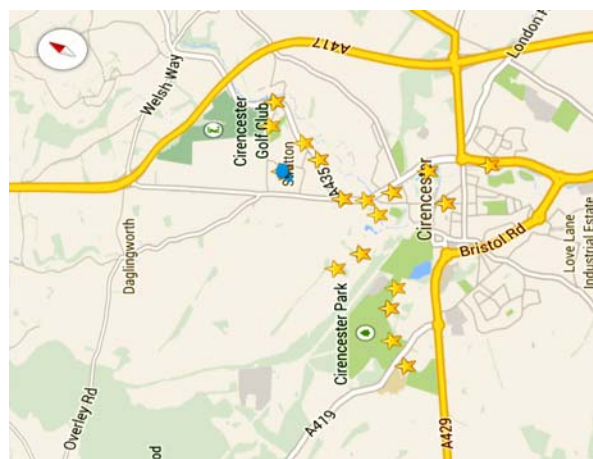


Figure 1. Locations of studied area in Cirencester.

Geographical positions and altitude of the studied locations; 51°42'37''N, 1°59'31''W (137 m); 51°42'47''N, 1°59'25''W (136 m); 51°43'15''N, 1°58'55''W (134 m); 51°43'20''N, 1°59'12''W (145 m); 51°43'25''N, 1°58'45''W (137 m); 51°43'42''N - 1°59'6''W (118 m), 51°44'14''N - 1°58'27''W (152 m), 51°44'18''N - 1°58'12''W (137 m), 51°43'54''N - 1°58'23''W (132 m), 51°43'33''N - 1°58'35''W (117 m), 51°43'25''N - 1°58'27''W (112 m), 51°43'18''N - 1°58'14''W (112 m), 51°43'11''N - 1°57'51''W (112 m), 51°42'53''N - 1°57'28''W (112 m) and 51°42'17''N - 1°54'6''W (105 m) shaped (Figure 1).

3. RESULTS AND DISCUSSION

The survey identified 32 families and 96 genus and total 126 taxa (Table 1). Families ranked according to number of genus included: It was determined that 20 genera of *Asteraceae* (21.5%), 13 genera of *Poaceae* (14.0%), 8 genera of *Fabaceae* (8.6%), 4 genera of *Apiaceae*, *Lamiaceae*, *Polygonaceae* and *Rosaceae* (4.3%), 3 genera of *Brassicaceae* and *Plantaginaceae* (3.2%), 2 genera of *Boraginaceae*, *Caryophyllaceae*, *Convolvulaceae*, *Malvaceae*, *Papaveraceae*, *Ranunculaceae* and *Scrophulariaceae* (2.2%), and 1 genus of *Amaranthaceae*, *Araceae*, *Araliaceae*, *Cyperaceae*, *Dennstaedtiaceae*, *Dipsacaceae*, *Euphorbiaceae*, *Geraniaceae*, *Lythraceae*, *Myrsinaceae*, *Onagraceae*, *Orchidaceae*, *Rubiaceae*, *Solanaceae*, *Urticaceae*, and *Violaceae* (1.1%).

According to number of the species families:

Asteraceae 27 (21.4%), *Poaceae* 17 (13.5%), *Fabaceae* 12 (9.5%), *Lamiaceae* 7 (5.6%), *Polygonaceae* and *Rosaceae* 6 (4.8%), *Plantaginaceae* 5 (4.0%), *Apiaceae* and *Brassicaceae* 4 (3.2%), *Geraniaceae*, *Malvaceae*, *Papaveraceae* 3 (2.4%), *Amaranthaceae*, *Boraginaceae*, *Caryophyllaceae*, *Convolvulaceae*, *Ranunculaceae*, *Scrophulariaceae* and *Urticaceae* 2 (1.6%), *Araceae*, *Araliaceae*, *Cyperaceae*, *Dennstaedtiaceae*, *Dipsacaceae*, *Euphorbiaceae*, *Lythraceae*, *Myrsinaceae*, *Onagraceae*, *Orchidaceae*, *Rubiaceae*, *Solanaceae* and *Violaceae* 1 (0.8%), respectively.

In terms of number of species Genuses: *Cirsium* and *Trifolium* 4; *Sonchus*, *Lamium*, *Poa* and *Rumex* 3; *Chenopodium*, *Matricaria*, *Senecio*, *Sinapis*, *Vicia*, *Stachys*, *Malva*, *Fumaria*, *Plantago*, *Veronica*, *Alopecurus*, *Festuca*, *Lolium* and *Urtica* 2, and other

genus have 1 species, respectively.

Plants were classified according to their status such as 105 least concern plants, 9 rare plants, 9 scarce plants, 4 vulnerable plants and 1 endemic plant and 1 near threatened plant. In terms of life-style/growth habit of the plants determined there were 66 perennial, 42 annual, 6 biennial, 5 annual-biennial, 5 biennial-perennial and 2 annual-biennial-perennial.

Ranking species in terms of purpose and status identified 103 weeds, 64 medicinal, 55 poisonous, 28 invasive, 26 forage crops and 9 ornamental plants. All species were photographed and catalogued during the survey. A sample selection of photographs is shown in Figure 2.

In the study families of *Asteraceae*, *Poaceae*, *Fabaceae*, *Lamiaceae*, *Polygonaceae* and *Rosaceae*, genuses of *Cirsium*, *Trifolium*, *Sonchus*, *Lamium*, *Poa* and *Rumex* were determined as more dominated in

Table 1. Botanical, family and common name, habit, status/uses growing stage and determination dates of some wild plants in Cirencester flora

No	Botanical Name	Family Name	Common Name	Habit*	Status/Uses**	Stage	Date
1	<i>Achillea millefolium</i> L.	<i>Asteraceae</i>	Common yarrow, Western yarrow	P	Ip, Lc, Mp, Pp, W	Flower	18.07.2013
2	<i>Aegopodium podagraria</i> L.	<i>Apiaceae</i>	Ashweed, Bishop's weed,	P	Lc, Ip, Mp, W	Flower	03.07.2013
3	<i>Aethusa cynapius</i> L.	<i>Apiaceae</i>	Fool's parsley	A	Lc, Pp, Mp, W	Flower	01.07.2013
4	<i>Agropyron repens</i> (L.) P.Beauv.	<i>Poaceae</i>	Couchgrass, quackgrass,	P	Fc, Ip, Mp, W	Spike	27.07.2013
5	<i>Alcea rosea</i> L.	<i>Malvaceae</i>	Hollyhock	A, B, P	Ip, Mp	Flower	03.07.2013
6	<i>Alliaria petiolata</i> (Bieb.) Cav.& Gr.	<i>Brassicaceae</i>	Garlic mustard	B	Ip, Lc, Mp, Rp, W	Flower	02.07.2013
7	<i>Alopecurus myosuroides</i> Huds.	<i>Poaceae</i>	Black-grass	A	Lc, W	Spike	11.07.2013
8	<i>Alopecurus pratensis</i> L.	<i>Poaceae</i>	Meadow foxtail	P	Fc, Lc, W	Spike	27.07.2013
9	<i>Anacamptis pyramidalis</i> (L.) Rich.	<i>Orchidaceae</i>	Pyramidal Orchid	P	Ap, Rp	Flower	24.07.2013
10	<i>Anagallis arvensis</i> L.	<i>Myrsinaceae</i>	Scarlet pimpernel	A	Lc, Pp, Mp, W	Flower	02.07.2013
11	<i>Arctium lappa</i> L.	<i>Asteraceae</i>	Greater burdock	B	Lc, Mp, Pp, W	Flower	02.07.2013
12	<i>Arrhenatherum elatius</i> (L.) P. Beauv	<i>Poaceae</i>	Onion couch	P	Fc, Lc, W	Spike	09.07.2013
13	<i>Artemisia vulgaris</i> L.	<i>Asteraceae</i>	Mugwort, Common wormwood	B	Lc, Mp, Pp, W	Flower	03.07.2013
14	<i>Arum maculatum</i> L.	<i>Araceae</i>	Cuckoopint	P	Lc, Mp, Pp, Sp	Fruit	03.08.2013
15	<i>Avena fatua</i> L.	<i>Poaceae</i>	Wild-oat	A	Lc, W	Spike	12.07.2013
16	<i>Bellis perennis</i> L.	<i>Asteraceae</i>	Daisy, Common Daisy	P	Lc, Mp, W	Flower	18.07.2013
17	<i>Bromus hordeaceus</i> L.	<i>Poaceae</i>	Soft brome	A, B	Lc, W	Spike	03.07.2013
18	<i>Calystegia sepium</i> (L.) R.Br.	<i>Convolvulaceae</i>	Hedge bindweed	P	Lc, Mp, Rp, W	Flower	02.07.2013
19	<i>Capsella bursa-pastoris</i> (L.) Medik.	<i>Brassicaceae</i>	Shepherd's-purse	P	Lc, Mp, Pp, W	Flower	02.07.2013
20	<i>Carex pendula</i> Huds.	<i>Cyperaceae</i>	pendulous sedge	P	Lc, Pp, W	Flower	02.07.2013
21	<i>Centaurea nigra</i> L.	<i>Asteraceae</i>	Black Knapweed	P	Lc, W	Flower	02.07.2013
22	<i>Chenopodium album</i> L.	<i>Amaranthaceae</i>	Fat hen, Lambsquarters	A	Ip, Lc, Pp, W	Flower	01.07.2013
23	<i>Chenopodium murale</i> L.	<i>Amaranthaceae</i>	Nettleleaf goosefoot, Sowbane	A	Rp, Vu, W	Flower	18.07.2013
24	<i>Chrysanthemum segetum</i> L.	<i>Asteraceae</i>	Corn marigold, Corn daisy	P	Vu, W	Flower	07.08.2013
25	<i>Cichorium intybus</i> L.	<i>Asteraceae</i>	Common chicory	P	Ip, Lc, Mp, W	Flower	29.08.2013
26	<i>Cirsium arvense</i> (L.) Scop.	<i>Asteraceae</i>	Creeping thistle, Canada thistle	P	Lc, Ip, W	Flower	21.07.2013

Table 1. Continued

No	Botanical Name	Family Name	Common Name	Habit*	Status/Uses**	Stage	Date
27	<i>Cirsium eriophorum</i> (L.) Scop.	Asteraceae	Woolly thistle	P	Lc, W	Flower	21.07.2013
28	<i>Cirsium palustre</i> (L.) Scop.	Asteraceae	Marsh thistle	P	Lc, W	Flower	21.07.2013
29	<i>Cirsium vulgare</i> (Savi) Ten.	Asteraceae	Spear thistle, Bull thistle	B, P	Lc, Ip, W	Flower	01.07.2013
30	<i>Clematis vitalba</i> L.	Ranunculaceae	Old man's beard, Traveller's Joy	P	Lc, Mp, Op, Pp, W	Flower	13.08.2013
31	<i>Convolvulus arvensis</i> L.	Convolvulaceae	Field bindweed	P	Lc, Ip, Sp, W	Flower	17.07.2013
32	<i>Crataegus monogyna</i>	Rosaceae	Compacta	P	Lc, Mp, Pp	Flower	02.07.2013
33	<i>Dactylis glomerata</i> L.	Poaceae	Cock's-foot	P	Lc, Fc, Ip, Pp, W	Spike	26.06.2013
34	<i>Dipsacus fullonum</i> L.	Dipsacaceae	Fuller's teasel, wild teasel	B, P	Ip, Lc, Mp, W	Flower	21.07.2013
35	<i>Epilobium hirsutum</i> L.	Onagraceae	Red campion, Red catchfly	A, P	Lc, Op	Flower	04.08.2013
36	<i>Euphorbia amygdaloides</i> L.	Euphorbiaceae	Wood spurge	P	Lc, Mp, Pp	Flower	27.07.2013
37	<i>Fallopia convolvulus</i> (L.) A.Löve	Polygonaceae	Black-bindweed	A	Lc, Pp, W	Flower	11.07.2013
38	<i>Festuca arundinacea</i> Schreb.	Poaceae	Tall fescue	P	Lc, Fc, Ip, Pp	Spike	09.07.2013
39	<i>Festuca rubra</i> L.	Poaceae	Red fescue	P	Lc, Fc, W	Spike	09.07.2013
40	<i>Filipendula ulmaria</i> (L.) Maxim.	Rosaceae	meadowsweet	P	Mp, Op	Flower	27.07.2013
41	<i>Fumaria officinalis</i> L.	Papaveraceae	Common fumitory	A	Lc, Mp, Rp, W	Flower	11.08.2013
42	<i>Fumaria parviflora</i>	Papaveraceae	Common fumitory	A	Vu, Mp, Sp, W	Flower	11.08.2013
43	<i>Galeopsis tetrahit</i>	Lamiaceae	Common Hemp-nettle	A	Lc, Pp, W	Flower	09.07.2013
44	<i>Galium aparine</i> L.	Rubiaceae	Cleavers	A	Lc, Mp, W	Flower	02.07.2013
45	<i>Geranium dissectum</i> L.	Geraniaceae	Cut-leaves Crane's bill	A	Lc, W	Flower	02.07.2013
46	<i>Geranium pratense</i> L.	Geraniaceae	Mrs Kendall Clark	A	Lc, Sp, W	Flower	02.07.2013
47	<i>Geranium robertianum</i> L.	Geraniaceae	Herb Robert	A	Lc, Mp, W	Flower	01.07.2013
48	<i>Geum urbanum</i> L.	Rosaceae	Wood avens, Herb bennet	P	Ip, Lc	Flower	02.09.2013
49	<i>Hedera helix</i> L.	Araliaceae	English ivy	P	Lc, Mp, Op, Pp, W	Leaf	03.08.2013
50	<i>Heracleum sphondylium</i> L.	Apiaceae	Hogweed, Common hogweed	B, P	Lc, Pp	Flower	02.07.2013
51	<i>Holcus lanatus</i> L.	Poaceae	Yorkshire Fog	P	Lc, Fc, Pp	Spike	02.07.2013
52	<i>Hordeum murinum</i> L.	Poaceae	Wall barley	A	Lc, W	Spike	02.07.2013
53	<i>Knautia arvensis</i>	Dipsacaceae	Field Scabious	P	Lc, Mp, W	Flower	26.07.2013
54	<i>Lactuca serriola</i>	Asteraceae	Prickly lettuce	A, B	Lc, W	Flower	27.07.2013
55	<i>Lamium album</i> L.	Lamiaceae	White dead-nettle	P	Lc, Mp, Pp, Rp, W	Flower	01.07.2013
56	<i>Lamium amplexicaule</i> L.	Lamiaceae	Henbit dead-nettle	A	Lc, Pp, Sp, W	Flower	24.07.2013
57	<i>Lamium purpureum</i> L.	Lamiaceae	Henbit deadnettle	A, B	Lc, Mp, Pp, W	Flower	02.07.2013
58	<i>Lapsana communis</i> L.	Asteraceae	Nipplewort	A	Lc, W	Flower	02.07.2013
59	<i>Lathyrus pratensis</i> L.	Fabaceae	Meadow vetchling	P	Fc, Lc, Pp, W	Flower	11.07.2013
60	<i>Leucanthemum vulgare</i> Lam.	Asteraceae	Oxeye Daisy	P	Lc, Mp, W	Flower	02.07.2013
61	<i>Linaria vulgaris</i> Miller	Plantaginaceae	Yellow toadflax	P	Lc, Ip, Mp, Pp, W	Flower	11.07.2013
62	<i>Lolium multiflorum</i> Lam.	Poaceae	Italian raygrass	A	Fc, Pp, W	Spike	27.07.2013
63	<i>Lolium perenne</i> L.	Poaceae	Perennial raygrass	P	Fc, Ip, Lc, Pp, W	Spike	09.07.2013
64	<i>Lotus corniculatus</i> L.	Fabaceae	Bird's-foot-trefoil	P	Fc, Lc, Pp, W	Flower	28.08.2013
65	<i>Lythrum salicaria</i> L.	Lythraceae	Purple loosestrife	P	Ip, Lc, Mp, Op, W	Flower	02.07.2013
66	<i>Malva neglecta</i> Wallr.	Malvaceae	Dwarf mallow	A	Lc, Mp, Pp, W	Flower	04.08.2013
67	<i>Malva sylvestris</i> L.	Malvaceae	Common mallow	A	Lc, Mp, Pp, W	Flower	01.07.2013

Table 1. Continued

No	Botanical Name	Family Name	Common Name	Habit [*]	Status/Uses ^{**}	Stage	Date
68	<i>Matricaria discoidea</i> DC.	Asteraceae	Pineapple Weed	A	Mp, W	Flower	21.07.2013
69	<i>Matricaria recutita</i> L.	Asteraceae	German chamomile	A	Ip, Lc, Mp, W	Flower	01.07.2013
70	<i>Medicago lupulina</i> L.	Fabaceae	Black medick	P	Fc, Vu, W	Flower	27.07.2013
71	<i>Melilotus officinalis</i> (L.) Pallas	Fabaceae	Yellow sweetclover	B	Fc, Ip, Mp, Pp, W	Flower	31.07.2013
72	<i>Mentha aquatica</i> L.	Lamiaceae	Water mint	P	Lc, Mp, Pp	Flower	27.07.2013
73	<i>Myosotis arvensis</i> (L.) Hill	Boraginaceae	Field forget-me-not	A, B	Lc, Mp, W	Flower	28.08.2013
74	<i>Odontites vernus</i>	Scrophulariaceae	Red bartsia	A	Lc, W	Flower	02.07.2013
75	<i>Onobrychis viciifolia</i> Scop.	Fabaceae	Sainfoin	P	Fc, Nt	Flower	27.07.2013
76	<i>Onopordum acanthium</i> L.	Asteraceae	Scotch thistle	B	Ip, Lc, Mp, Sp, W	Flower	27.07.2013
77	<i>Papaver rhoeas</i> L.	Papaveraceae	Common poppy	A	Lc, Mp, Pp, Rp, W	Flower	03.08.2013
78	<i>Persicaria maculosa</i> Gray	Polygonaceae	Redshank, Spotted lady thumb	A	Ip, Lc, Pp, W	Flower	05.07.2013
79	<i>Phleum pratense</i> L.	Poaceae	Timothy	P	Fc, Ip, Lc, W	Spike	11.07.2013
80	<i>Phragmites australis</i> (Cav.) Tr. ex St.	Poaceae	Common reed	P	Ip, Lc, Mp, W	Spike	02.07.2013
81	<i>Picris echioides</i> L.	Asteraceae	Bristly ox-tongue	A, B	Lc, Mp	Flower	03.07.2013
82	<i>Plantago lanceolata</i> L.	Plantaginaceae	Ribwort plantain, English plantain	P	Ip, Lc, Mp, W	Flower	01.07.2013
83	<i>Plantago major</i> L.	Plantaginaceae	Greater Plantain	P	Ip, Lc, Mp, W	Flower	01.07.2013
84	<i>Poa annua</i> L.	Poaceae	Annual meadow-grass	A	Fc, Ip, Lc, W	Spike	11.07.2013
85	<i>Poa pratensis</i> L.	Poaceae	Kentucky bluegrass	P	Fc, Ip, Lc	Spike	11.07.2013
86	<i>Poa trivialis</i> L.	Poaceae	Rough meadow-grass	P	Fc, Ip, Lc, W	Spike	11.07.2013
87	<i>Polygonum aviculare</i> L.	Polygonaceae	Knot-grass, Prostrate knotweed	A	Ip, Lc, Mp, Pp, W	Flower	11.07.2013
88	<i>Pseudofumaria lutea</i> (L.) Borkh.	Fabaceae	Yellow Corydalis	P	Fc, Op	Flower	04.08.2013
89	<i>Pteridium aquilinum</i> (L.) Kuhn	Dennstaedtiaceae	Brakenfern	P	Lc, Mp, Pp	Leaf	18.07.2013
90	<i>Ranunculus repens</i> L.	Ranunculaceae	Creeping buttercup	P	Lc, Op, Pp, W	Flower	01.07.2013
91	<i>Rosa canina</i>	Rosaceae	Dog-rose	P	Lc, Mp, Op	Flower	02.07.2013
92	<i>Rubus fruticosus aggregata</i>	Rosaceae	Bramble, Blackberry	P	Lc, Mp, W	Flower	08.07.2013
93	<i>Rumex crispus</i> L.	Polygonaceae	Curled dock, Curly dock	P	Ip, Lc, Mp, Pp, W	Flower	07.07.2013
94	<i>Rumex obtusifolius</i> L.	Polygonaceae	Broad leaved dock, Bitter dock	P	Lc, Pp, W	Flower	01.07.2013
95	<i>Rumex rupestris</i> Le Gall	Polygonaceae	Shore dock	P	En, Pp, W	Fruit	27.07.2013
96	<i>Sanguisorba minor</i> Scop.	Rosaceae	Salad burnet, Garden burnet	P	Fc	Fruit	03.08.2013
97	<i>Scandix pecten-veneris</i> L.	Apiaceae	Shepherd's needle	A	Ce, Sp, W	Flower	04.07.2013
98	<i>Senecio jacobaea</i> L.	Asteraceae	Ragwort, Tansy ragwort	A	Lc, Mp, Pp, W	Flower	11.07.2013
99	<i>Senecio vulgaris</i> L.	Asteraceae	Groundsel, Common groundsel	A	Lc, Mp, Pp, W	Flower	11.07.2013
100	<i>Silene latifolia</i> Poir.	Caryophyllaceae	White campion	A, B, P	Lc, W	Flower	21.07.2013
101	<i>Sinapis alba</i> L.	Brassicaceae	Charlock	A	Lc, Mp, Pp, W	Flower	02.07.2013

Table 1. Continued

No	Botanical Name	Family Name	Common Name	Habit *	Status/Uses **	Stage	Date
102	<i>Sinapis arvensis</i> L.	Brassicaceae	Charlock	A	Lc, Pp, W	Flower	02.07.2013
103	<i>Solanum dulcamara</i> L.	Solanaceae	Bittersweet	A	Ip, Lc, Mp, Pp, Rp, W	Flower	02.07.2013
104	<i>Sonchus arvensis</i> L.	Asteraceae	Perennial sow-thistle	P	Lc, Ip, W	Flower	08.07.2013
105	<i>Sonchus asper</i> (L.) Hill	Asteraceae	Prickly sow-thistle	A	Lc, W	Flower	09.07.2013
106	<i>Sonchus oleraceus</i> L.	Asteraceae	Black nightshade	A	Ip, Lc, W	Flower	09.07.2013
107	<i>Stachys palustris</i> L.	Lamiaceae	Marsh Woundwort	P	Lc, Mp, W	Flower	21.07.2013
108	<i>Stachys sylvatica</i> L.	Lamiaceae	Hedge Woundwort	P	Lc, W	Flower	02.07.2013
109	<i>Stellaria media</i> (L.) Vill.	Caryophyllaceae	Common chickweed	A	Lc, Mp, Pp, W	Flower	07.07.2013
110	<i>Symphytum uplandicum</i> Nyman	Boraginaceae	Comfrey	P	Mp, Pp, W	Flower	08.07.2013
111	<i>Tanacetum parthenium</i> (L.) Sch. Bi.	Asteraceae	Feverfew	P	Lc, Mp, W	Flower	08.07.2013
112	<i>Taraxacum officinale</i> Weber	Asteraceae	Dandelion	P	Ip, Mp, W	Flower	01.08.2013
113	<i>Tragopogon pratensis</i> L.	Asteraceae	Goat's-beard	B	Lc, W	Flower	10.07.2013
114	<i>Trifolium dubium</i> Sibth.	Fabaceae	Lesser Trefoil, Suckling clover	P	Fc, Lc, Pp	Flower	07.08.2013
115	<i>Trifolium hybridum</i> L.	Fabaceae	Alsike clover	P	Fc, Pp	Flower	10.07.2013
116	<i>Trifolium pratense</i> L.	Fabaceae	Red clover	B, P	Fc, Ip, Lc, Mp, Pp	Flower	02.07.2013
117	<i>Trifolium repens</i> L.	Fabaceae	White clover	P	Fc, Ip, Lc, Mp, Pp, W	Flower	01.07.2013
118	<i>Tussilago farfara</i> L.	Asteraceae	Coltsfoot	P	Lc, Mp, Pp, W	Leaf	02.07.2013
119	<i>Urtica dioica</i> L.	Urticaceae	Stinging nettle	P	Lc, Mp, Pp, W	Flower	16.06.2013
120	<i>Urtica urens</i> L.	Urticaceae	Small nettle	A	Lc, Mp, Pp, W	Leaf	20.05.2013
121	<i>Verbascum nigrum</i> L.	Scrophulariaceae	Dark Mullein	B, P	Ip, Lc, Mp, W	Flower	04.07.2013
122	<i>Veronica hederifolia</i> L.	Plantaginaceae	Ivy-leaved speedwell	A	Lc, W	Flower	11.07.2013
123	<i>Veronica persica</i> Poiret	Plantaginaceae	Commonfield-speedwell	A	W	Flower	02.07.2013
124	<i>Vicia sativa</i> L.	Fabaceae	Common vetch	A	Fc, Lc, Pp, Sp, W	Flower	02.07.2013
125	<i>Vicia sativa</i> ssp. <i>segetalis</i> (Thui.)Ar.	Fabaceae	Common vetch	A	Fc, Lc, Pp	Flower	02.07.2013
126	<i>Viola tricolor</i> L.	Violaceae	Wild pansy, Johnny jumpup	A	Mp, Nt, Op, Rp, Sp, W	Flower	01.07.2013

*) **A:** Annual, **B:** Biennial, **P:** Perennial

) **Ce: Critically endangered, **En:** Endemic, **Fc:** Forage crops, **Ip:** Invasive plant, **Lc:** Least concern, **Mp:** Medicinal plant, **Nt:** Near threatened, **Op:** Ornamental plant, **Pp:** Poisonous plant, **Rp:** Rare plant, **Sp:** Scars plant, **Vu:** Vulnerable plant, **W:** Weed

wild flora of Cirencester. Similar families were emphasized in the South West Region by Anonymous (2010), Rutter (2011), Pilkington (2012) and Anonymous (2013b).

4. CONCLUSION

A survey of wild flora of the urban and peri-urban areas in Cirencester, Gloucestershire, England, was

carried out during the summer of 2013. The survey identified 32 families, 96 genera and 126 species. Weeds (103) were identified as the most abundant in the studied flora. Sixty four species of medicinal plants were identified in the flora with important potential in terms of pharmaceutical and medicinal areas. Twenty six species of forage crops were determined in the flora which has great importance for

Some wild plants in the Cirencester natural flora



Linaria vulgaris



Symphytum uplandicum



Verbascum nigrum



Stachys palustris



Papaver rhoeas



Centaurea nigra



Chrysanthemum segetum



Trifolium pratense



Leucanthemum vulgare



Dipsacus fullonum



Cichorium intybus



Arum maculatum



Onobrychis viciifolia



Senecio jacobea



Arctium lappa

Figure 2. The photographs of some of the plants in the flora of Cirencester

animal husbandry. However, fifty five poisonous plants identified from this study can be a possible threat to human and animal health.

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