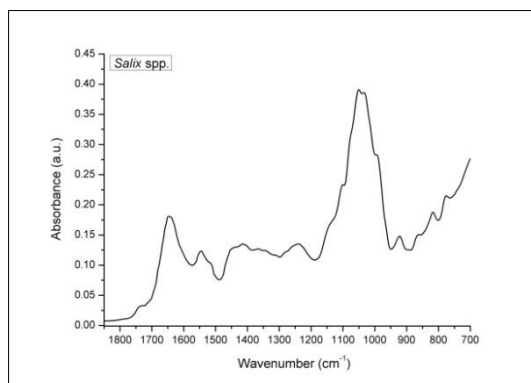


**Supplementary Material S2.** Descriptive sheets for unifloral bee pollen collected from three Croatian regions (Continental - CR, Mountain - MR, Adriatic - AR): visual identity (colour), nutritional value (content of ash, proteins, total lipids, total sugars, fructose, glucose and sucrose; expressed as a percentage of the total weight), and FTIR-ATR spectra (fingerprint region: 1800 - 650  $\text{cm}^{-1}$ )

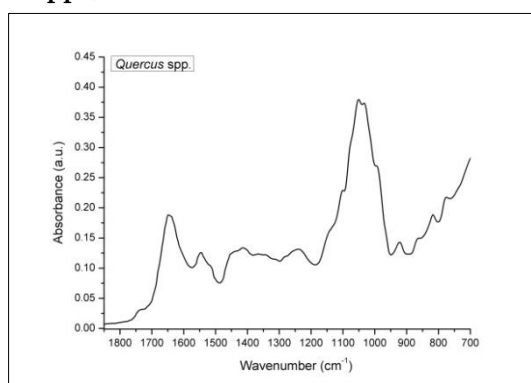
\*unifloral bee pollens are listed chronologically according to the blooming appearance of the corresponding plant species

### 1. Willow (*Salix* spp.); collected from: CR, MR



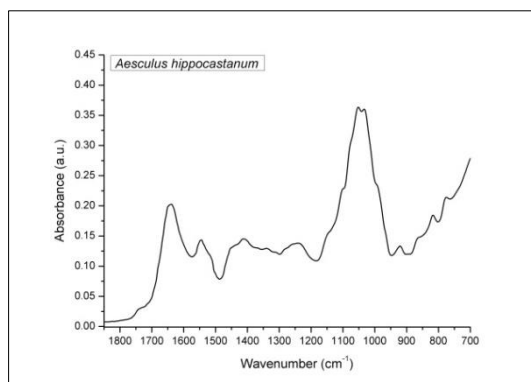
Botanical origin	<i>Salix</i> spp.
Colour	Light orange
Ash (%)	2.26
Proteins (%)	15.87
Total lipids (%)	8.20
Total sugars (%)	30.72
Fructose (%)	14.84
Glucose (%)	12.58
Sucrose (%)	10.39

### 2. Oak (*Quercus* spp.); collected from: CR



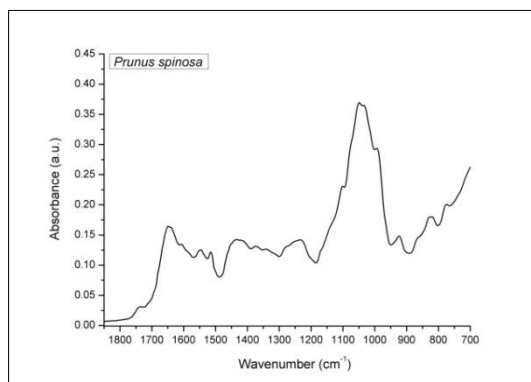
Botanical origin	<i>Quercus</i> spp.
Colour	Light orange
Ash (%)	2.44
Proteins (%)	17.63
Total lipids (%)	6.67
Total sugars (%)	40.28
Fructose (%)	14.84
Glucose (%)	12.24
Sucrose (%)	13.20

### 3. Horse chestnut (*Aesculus hippocastanum* L.); collected from: CR



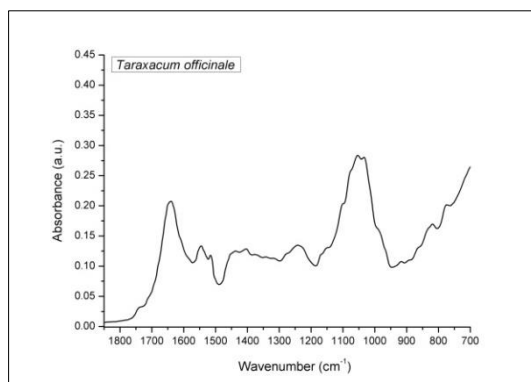
Botanical origin	<i>Aesculus hippocastanum</i> L.
Colour	Terracotta red
Ash (%)	2.53
Proteins (%)	23.40
Total lipids (%)	5.32
Total sugars (%)	21.48
Fructose (%)	9.33
Glucose (%)	7.69
Sucrose (%)	4.46

### 4. Blackthorn (*Prunus spinosa* L.); collected from: CR, MR



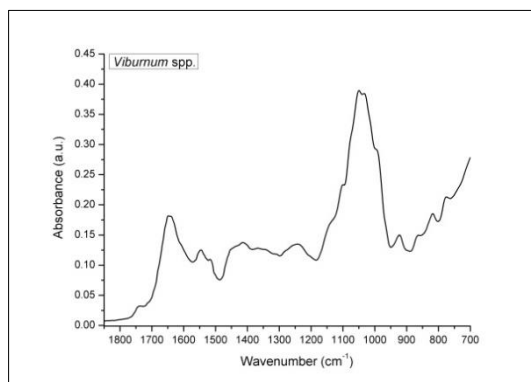
Botanical origin	<i>Prunus spinosa</i> L.
Colour	Oker – light brown
Ash (%)	2.60
Proteins (%)	20.81
Total lipids (%)	7.47
Total sugars (%)	35.80
Fructose (%)	10.17
Glucose (%)	8.60
Sucrose (%)	17.03

5. Common dandelion (*Taraxacum officinale* L.); collected from: CR, MR



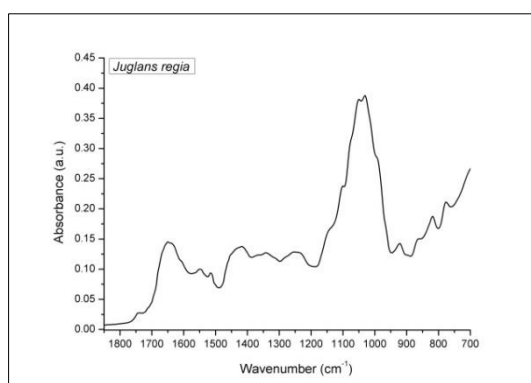
Botanical origin	<i>Taraxacum officinale</i> L.
Colour	Orange
Ash (%)	0.95
Proteins (%)	11.34
Total lipids (%)	14.84
Total sugars (%)	32.16
Fructose (%)	15.33
Glucose (%)	14.60
Sucrose (%)	2.23

6. Viburnum (*Viburnum* spp.), collected from: CR



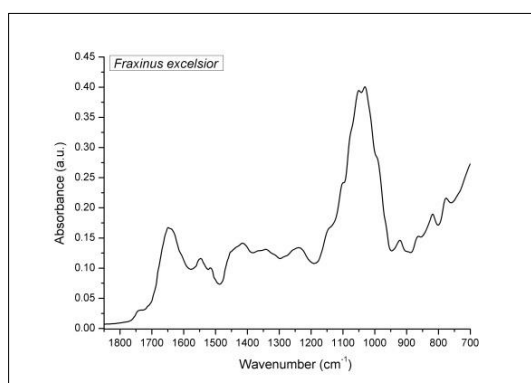
Botanical origin	<i>Viburnum</i> spp.
Colour	Yellow
Ash (%)	2.45
Proteins (%)	20.28
Total lipids (%)	7.17
Total sugars (%)	36.94
Fructose (%)	12.33
Glucose (%)	9.68
Sucrose (%)	14.93

**7. Persian/English walnut (*Juglans regia* L.); collected from: CR, MR**



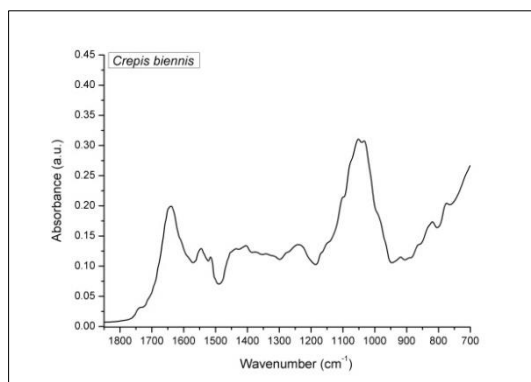
Botanical origin	<i>Juglans regia</i> L.
Colour	Yellow
Ash (%)	1.61.
Proteins (%)	12.70
Total lipids (%)	12.80
Total sugars (%)	38.17
Fructose (%)	16.65
Glucose (%)	14.16
Sucrose (%)	7.36

**8. Common ash (*Fraxinus excelsior* L.); collected from: CR**



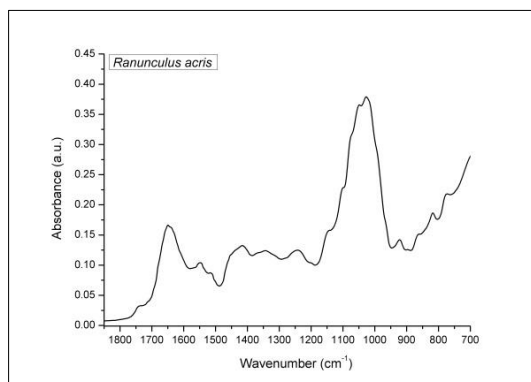
\*No data available for nutritional values

9. Rough hawk's beard (*Crepis biennis* L.); collected from: CR, MR, AR



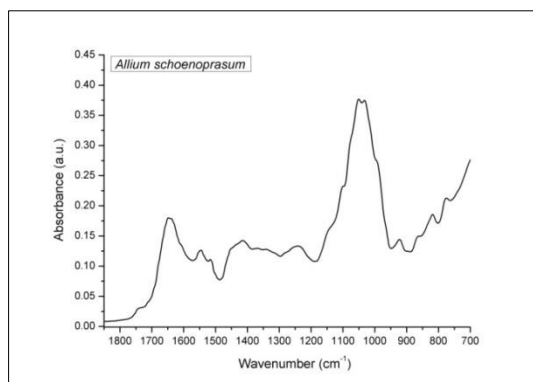
Botanical origin	<i>Crepis biennis</i> L.
Colour	Orange
Ash (%)	1.29
Proteins (%)	13.70
Total lipids (%)	11.96
Total sugars (%)	33.04
Fructose (%)	16.57
Glucose (%)	12.80
Sucrose (%)	3.67

10. Meadow buttercup (*Ranunculus acris* L.), collected from: CR



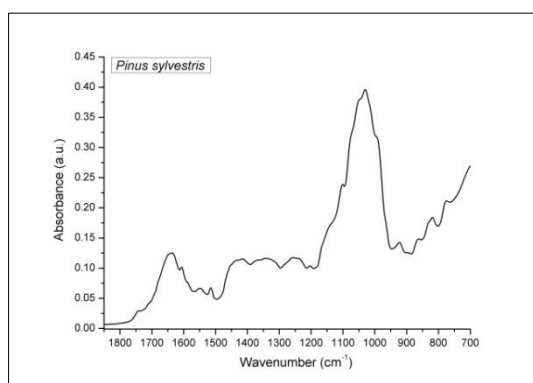
\*No data available for nutritional values

**11. Chives (*Allium schoenoprasum* L.); collected from: CR**



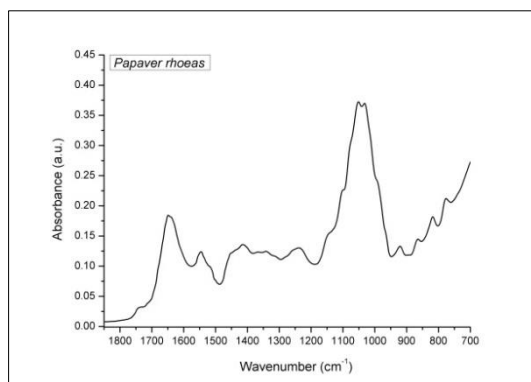
\*No data available for nutritional values

**12. Scots pine (*Pinus sylvestris* L.); collected from: CR, MR**



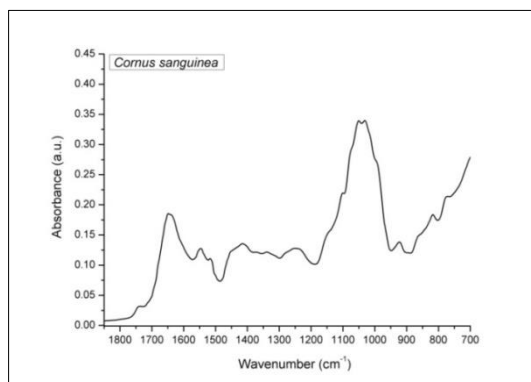
\*No data available for nutritional values

**13. Common poppy (*Papaver rhoeas* L.); collected from: CR, AR**



Botanical origin	<i>Papaver rhoeas</i> L.
Colour	Dark brown
Ash (%)	1.70
Proteins (%)	18.60
Total lipids (%)	6.14
Total sugars (%)	39.16
Fructose (%)	21.00
Glucose (%)	14.82
Sucrose (%)	3.34

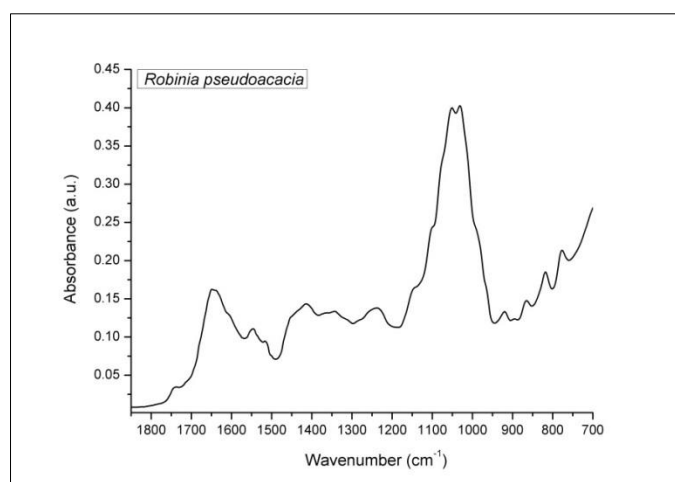
**14. Common dogwood (*Cornus sanguinea* L.); collected from: CR**



Botanical origin	<i>Cornus sanguinea</i> L.
Colour	Pastel yellow
Ash (%)	2.57
Proteins (%)	14.80
Total lipids (%)	8.54
Total sugars (%)	30.92
Fructose (%)	13.66
Glucose (%)	10.19
Sucrose (%)	7.07

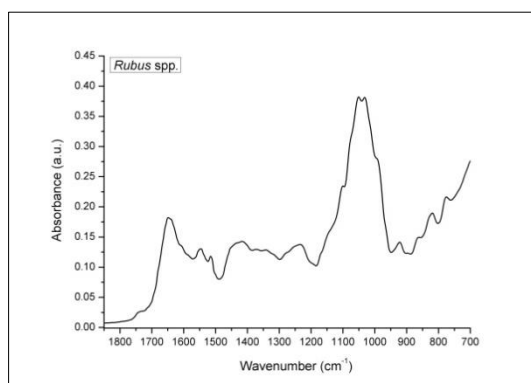


**15. Black locust (*Robinia pseudoacacia* L.); collected from: CR**



\*No data available for nutritional values

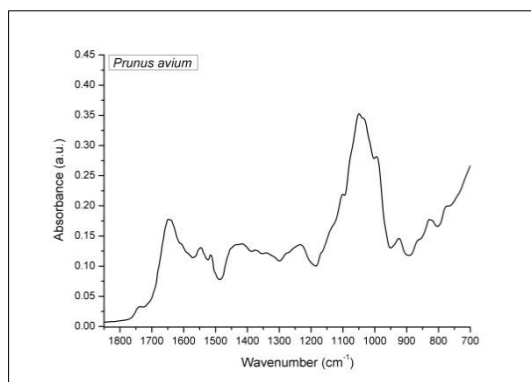
**16. Blackberry (*Rubus* spp.), collected from: CR**



\*No data available for nutritional values

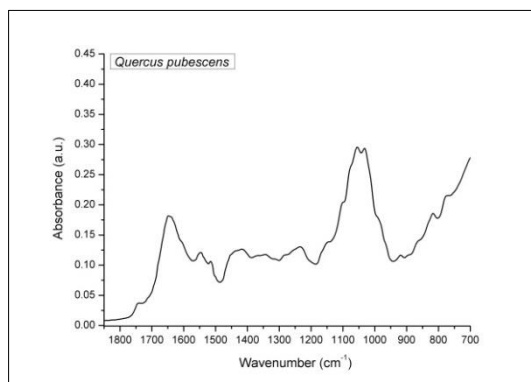
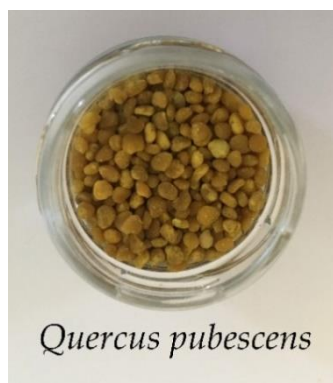


**17. Wild cherry (*Prunus avium* L.), collected from: MR**



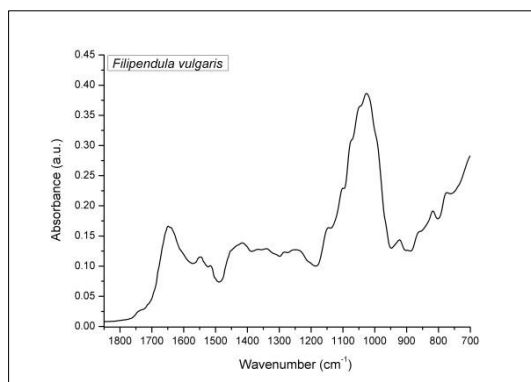
Botanical origin	<i>Prunus avium</i> L.
Colour	Oker
Ash (%)	3.22
Proteins (%)	18.56
Total lipids (%)	7.69
Total sugars (%)	33.84
Fructose (%)	10.47
Glucose (%)	8.30
Sucrose (%)	15.07

**18. Downy oak (*Quercus pubescens* Willd.); collected from: MR, AR**



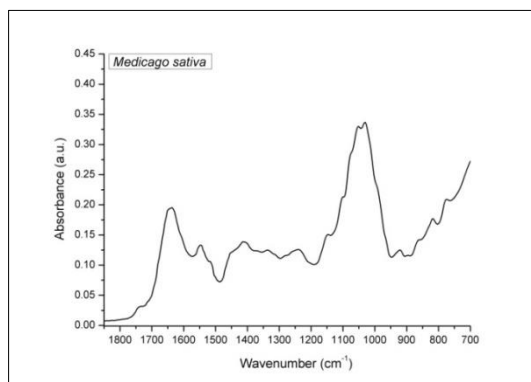
Botanical origin	<i>Quercus pubescens</i> Willd.
Colour	Dark yellow
Ash (%)	1.69
Proteins (%)	13.55
Total lipids (%)	8.54
Total sugars (%)	36.17
Fructose (%)	16.99
Glucose (%)	13.41
Sucrose (%)	5.77

**19. Dropwort (*Filipendula vulgaris* Moench); collected from: MR**



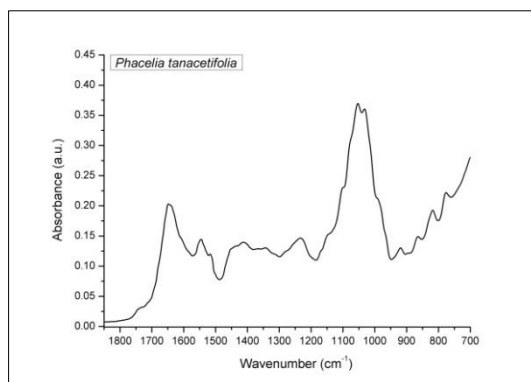
*Botanical origin	<i>Filipendula vulgaris</i> Moench
Colour	Yellow
Ash (%)	1.71
Proteins (%)	11.80
Total lipids (%)	3.72
Total sugars (%)	35.13
Fructose (%)	15.88
Glucose (%)	13.19
Sucrose (%)	6.06

**20. Alfalfa (*Medicago sativa* L.); collected from: MR**



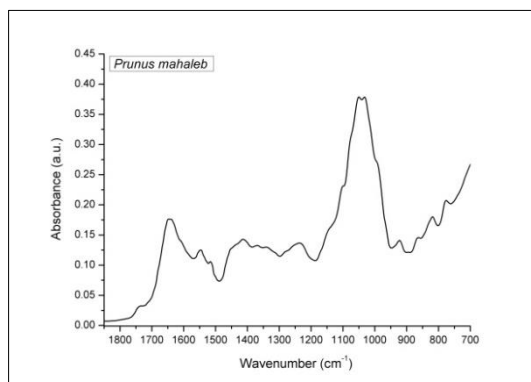
Botanical origin	<i>Medicago sativa</i> L.
Colour	Dark yellow
Ash (%)	2.36
Proteins (%)	19.66
Total lipids (%)	7.40
Total sugars (%)	29.94
Fructose (%)	15.63
Glucose (%)	11.80
Sucrose (%)	2.51

**21. Fiddleneck (*Phacelia tanacetifolia* Benth.); collected from: MR**



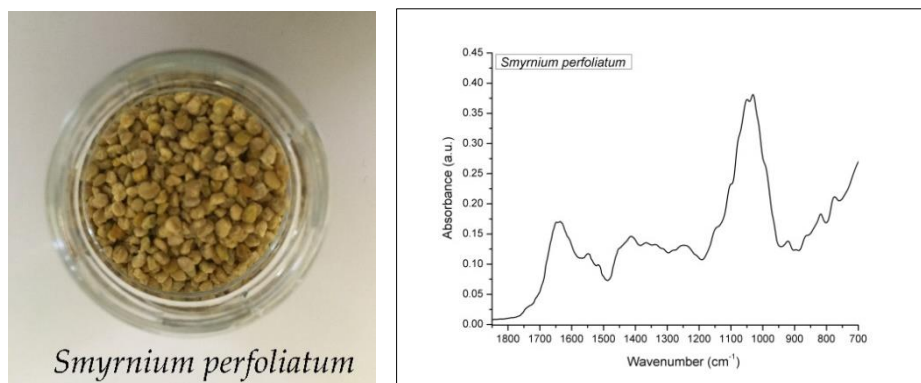
Botanical origin	<i>Phacelia tanacetifolia</i> Benth.
Colour	Purple
Ash (%)	2.24
Proteins (%)	21.68
Total lipids (%)	4.82
Total sugars (%)	38.81
Fructose (%)	20.00
Glucose (%)	15.23
Sucrose (%)	3.58

**22. Mahaleb cherry/St. Lucie's cherry (*Prunus mahaleb* L.); collected from: AR**



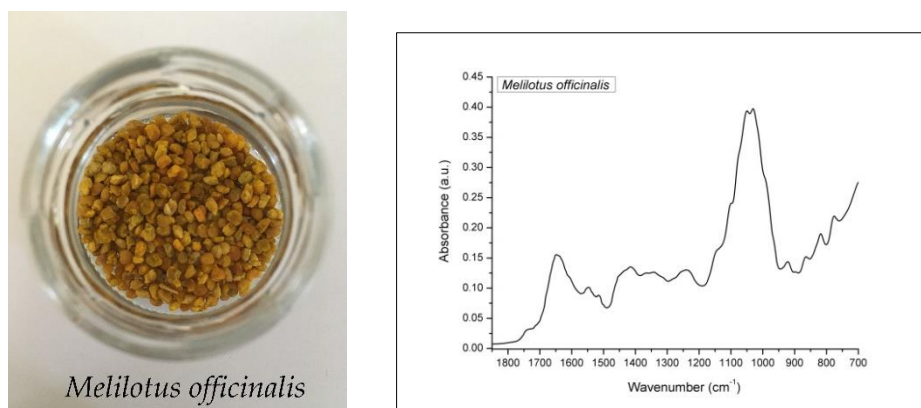
Botanical origin	<i>Prunus mahaleb</i> L.
Colour	Pastel orange
Ash (%)	2.70
Proteins (%)	19.40
Total lipids (%)	7.52
Total sugars (%)	35.33
Fructose (%)	12.37
Glucose (%)	10.43
Sucrose (%)	12.53

**23. Perfoliate alexanders (*Smyrniium perfoliatum* L.); collected from: AR**



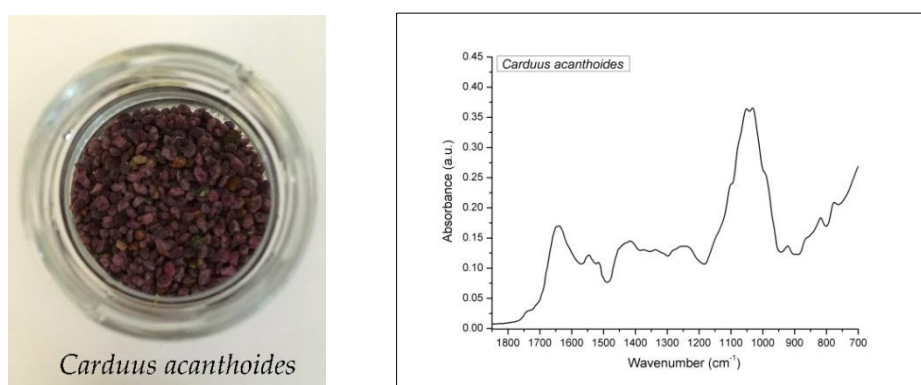
\*No data available for nutritional values

**24. Yellow sweet clover (*Melilotus officinalis* (L.) Pall.); collected from: AR**



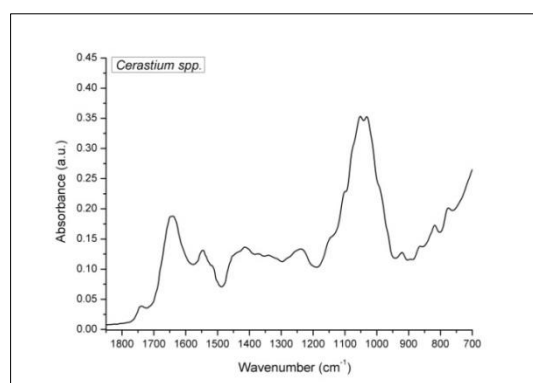
\*No data available for nutritional values

**25. Spiny plumeless thistle (*Carduus acanthoides* L.); collected from: AR**



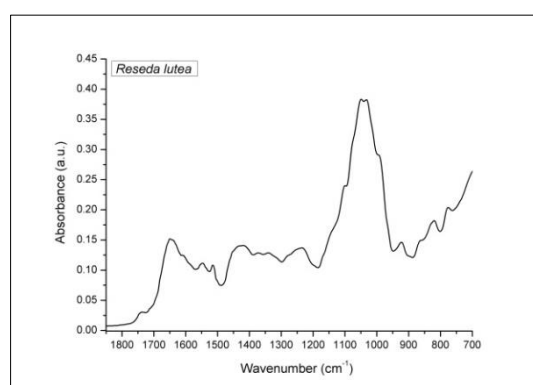
\*No data available for nutritional values

**26. Mouse-ear chickweed (*Cerastium* spp.); collected from: AR**



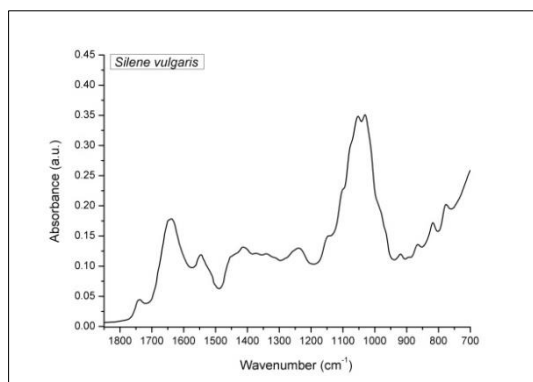
\*No data available for nutritional values

**27. Wild/yellow mignonette (*Reseda lutea* L.); collected from: AR**



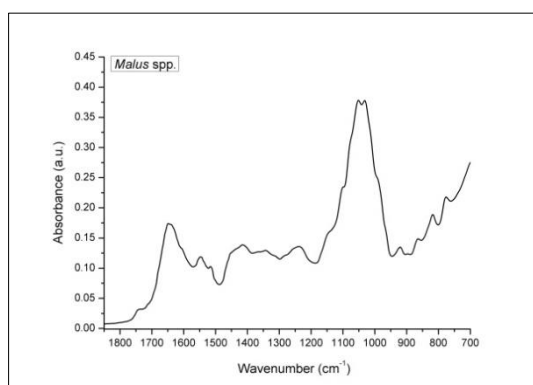
\*No data available for nutritional values

**28. Bladder campion (*Silene vulgaris* (Moench) Garcke); collected from: AR**



\*No data available for nutritional values

**29. Apple (*Malus spp.*); collected from: AR**



\*No data available for nutritional values