

# Some observations on the urban flora in Albania

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During a study trip through Albania in 2010 some historically significant towns have been visited and I made some unsystematic observations on flora and vegetation.

## Berat

Berat (Berati) situated in Central Albania has an uninterrupted settlement of 2.400 years. Berat is located at 60 m a.s. at the river Osum. It is a world heritage site of UNESCO since 2005. The number of inhabitants is about 36.500 and 64.500 depending on the information source.



Fig. 1: View from the castle of Berat on modern quarters and the river Osum.



Fig. 2: Dwelling houses inside the closed castle district.

- Ailanthus altissima*
- Alcea rosea*
- Anagallis arvensis* (petals blue and red)
- Anchusella cretica*
- Antirrhinum majus* (walls and roofs)
- Arenaria spec.* (walls)
- Arum italicum*
- Asplenium ceterach* (walls)
- Ballota nigra* (foot of walls)
- Bromus madritensis* (top of walls)
- Campanula erinus* (walls)
- Capsella bursa-pastoris*
- Carduus acanthoides*
- Catapodium rigidum* (walls)

- Cerinthe retorta*
- Chenopodium anthelminticum*
- Chondrilla juncea*
- Clematis vitalba*
- Conium maculatum*
- Convolvulus arvensis*
- Convolvulus elegantissimus*
- Conyza bonariensis*
- Cynodon dactylon*
- Cynoglossum creticum*
- Equisetum telmateia*
- Eryngium cf. campestre* (walls)
- Euphorbia helioscopia*
- Ficus caria* (foot of walls)

<i>Fumaria</i> spec. (walls)	<i>Quercus coccifera</i>
<i>Geranium brutium</i>	<i>Reseda lutea</i> (walls)
<i>Geranium purpureum</i> (walls)	<i>Rhagadiolus stellatus</i>
<i>Hedera</i> cf. <i>colchicum</i> (foot of walls)	<i>Rhus</i> cf. <i>coraria</i>
<i>Hedera helix</i>	<i>Rubus fruticosus</i> agg.
<i>Hirschfeldia incana</i> (top of walls)	<i>Rumex pulcher</i>
<i>Hordeum murinum</i> s. l.	<i>Sagina apetala</i>
<i>Hyoscyamus albus</i>	<i>Salvia verbenaca</i>
<i>Lactuca serriola</i> (walls)	<i>Salvia viridis</i>
<i>Lamium amplexicaule</i> (walls)	<i>Sambucus ebulus</i>
<i>Lophochloa cristata</i>	<i>Saxifraga tridactylites</i> (walls)
<i>Malabaila aurea</i>	<i>Sedum</i> cf. <i>rubens</i> (walls)
<i>Malva sylvestris</i>	<i>Sedum hispanicum</i> (walls)
<i>Marrubium peregrinum</i>	<i>Selaginella denticulata</i> (walls and steep slopes)
<i>Marrubium vulgare</i>	<i>Silybum marianum</i>
<i>Matricaria recutita</i>	<i>Saxifraga tridactylites</i>
<i>Mava sylvestris</i>	<i>Sisymbrium officinale</i>
<i>Mercurialis annua</i> (walls)	<i>Sonchus oleraceus</i>
<i>Micromeria</i> cf. <i>juliana</i>	<i>Spartium junceum</i> (macchia)
<i>Nigella damascena</i>	<i>Stachys</i> cf. <i>germanica</i> or <i>Stachys cretica</i> (see PILS [2016]: p.109)
<i>Olea europaea</i>	<i>Stellaria media</i>
<i>Oxalis corniculata</i>	<i>Symphytum squatum</i>
<i>Papaver rhoeas</i> (walls)	<i>Tamarix</i> spec. (at riverside)
<i>Parietaria judaica</i>	<i>Thelygonum cynocrambre</i> (walls)
<i>Parietaria lusitanica</i> (walls)	<i>Tordylium apulum</i>
<i>Phlomis fruticosa</i> (forming dense populations in the macchia)	<i>Trifolium</i> cf. <i>campestre</i>
<i>Pinus</i> spec.	<i>Umbilicus rupestris</i> (walls)
<i>Plantago coronopus</i>	<i>Urtica dioica</i>
<i>Plantago major</i> subsp. <i>major</i>	<i>Verbascum pulverulentum</i> (top of walls)
<i>Platanus orientalis</i> (at riverside)	<i>Verbena officinalis</i>
<i>Poa annua</i>	<i>Veronica arvensis</i>
<i>Polycarpon tetraphyllum</i> (walls)	<i>Veronica persica</i> (walls)
<i>Polygonum aviculare</i> agg.	<i>Vitis vinifera</i> (subspontaneous at feet of walls)
<i>Potentilla reptans</i>	
<i>Pteridium aquilinum</i>	

Frequently cultivated shrubs:

<i>Aesculus hippocastanum</i>	<i>Phoenix canariensis</i>
<i>Calendula officinalis</i>	<i>Pistacia terebinthus</i>
<i>Cedrus deodara</i>	<i>Robinia pseudoacacia</i>
<i>Cercis siliquastrum</i>	<i>Rosa</i> spec.
<i>Cupressus sempervirens</i>	<i>Tilia tomentosa</i>
<i>Fraxinus angustifolia</i>	<i>Trachycarpus fortunei</i>
<i>Lonicera japonica</i>	<i>Vitis vinifera</i>
<i>Olea europaea</i>	

## Gjirokastra

Gjirokastra (Gjirokastër) is an impressive old town in southern Albania built at very steep slopes, height above sea is 300 m. The number of inhabitants is between 20.000 and 35.000, it was city of birth of the famous writer Ismail Kadare and belongs since 2005 to the world heritage of UNESCO.



Fig. 3: Gjirokastra.



Fig. 4: Street in Gjirokastra: the roofs are covered with slates.

*Ailanthus altissima*  
*Alcea rosea*  
*Antirrhinum majus* (walls)  
*Arenaria spec.* (walls)  
*Asplenium ceterach* (walls)  
*Bromus madritensis*  
*Bunias erucago*  
*Campanula erinus* (walls)  
*Campanula ramosissima* (walls)  
*Capsella bursa-pastoris* (walls)  
*Capsella grandiflora* (foot of walls)  
*Carduus pycnocephalus*  
*Celtis australis* juv.  
*Cercis siliquastrum* juv.  
*Chondrilla juncea*  
*Clematis vitalba*  
*Convolvulus arvensis* (walls)  
*Conyza bonariensis*  
*Cynodon dactylon*  
*Dryopteris villarii* (walls)  
*Euphorbia cf. characias*  
*Ficus carica* (feet of walls)  
*Galium aparine*  
*Geranium molle*  
*Geranium lucidum* (walls, foot of wall)  
*Hedera helix* (walls)  
*Hordeum leporinum*  
*Hordeum murinum* s. l.  
*Lactuca serriola*  
*Lepidium draba*

*Lophochloa cristata*  
*Malabaila aurea*  
*Malva sylvestris*  
*Melilotus officinalis*  
*Mercurialis annua* (walls)  
*Onopordum illyricum*  
*Parietaria judaica*  
*Parietaria lusitanica* (walls)  
*Parthenocissus quinquefolia* and/or  
*Parthenocissus inserta*  
*Plantago major* subsp. *major*  
*Platanus orientalis* (walls)  
*Poa annua*  
*Rhagadiolus stellatus*  
*Rumex pulcher*  
*Sedum dasypodium* (walls)  
*Sherardia arvensis*  
*Silene vulgaris* subsp. *vulgaris*  
*Sisymbrium officinale*  
*Sonchus asper*  
*Sonchus oleraceus*  
*Symphytum squamatum*  
*Thelygonum cynocrambe* (walls)  
*Trifolium cf. pannonicum*  
*Umbilicus rupestris* (walls)  
*Urospermum picroides* (walls)  
*Urtica dioica*  
*Veronica arvensis* (walls)  
*Vinca major*

Cultivated trees and shrubs (among others):

*Ailanthus altissima*  
*Cedrus deodara*

*Cupressus sempervirens*  
*Vitis vinifera*

## Kruja

Kruja (Krujë) is a small town some 20 km in the north of the capital Tirana. Kruja was diocesan town already in the 9<sup>th</sup> century, its castle played an important role in the defense of the ottomans by the national hero Skanderbeg.



Fig. 5: View at modern parts of Kruja.

*Alcea rosea*  
*Arenaria spec.* (top of walls)  
*Asplenium ceterach* (walls of the castle)  
*Asplenium trichomanes* (walls of the castle)  
*Campanula cf. pyramidalis* (walls of the castle)  
*Campanula ramosissima*  
*Chenopodium album*  
*Chenopodium vulvaria*  
*Cynodon dactylon*  
*Dittrichia viscosa*  
*Ecballium elaterium* (foot of a wall)  
*Euphorbia helioscopia*  
*Ficus carica* (top of walls)  
*Galium spec.*  
*Geranium brutium*  
*Geranium purpureum* (roofs and top of walls)  
*Hedera helix*  
*Laurus nobilis* juv.  
*Micromeria cf. graeca* (walls)



Fig.6: Ethnographic Museum.

*Parietaria judaica* (walls)  
*Piptatherum miliaceum*  
*Plantago major* subsp. *major*  
*Poa annua*  
*Poa bulbosa* (walls of the castle)  
*Populus alba* juv.  
*Polypodium cambricum*  
*Potentilla reptans*  
*Pseudofumaria ochroleuca* (walls of the castle)  
*Robinia pseudoacacia*  
*Sambucus ebulus*  
*Sambucus nigra*  
*Saxifraga tridactylites* (walls of the castle)  
*Sedum hispanicum*  
*Sherardia arvensis*  
*Silene vulgaris* subsp. *vulgaris*  
*Stellaria media*  
*Tordylium apulum*  
*Urtica dioica*  
*Veronica persica*

## Sarande (2010)

Saranda (Sarandë) is situated at the coast of the Ionian See. It is one of the most important touristic centres in Albania. The town is in visibility of the Greek Isle Corfu.



Fig. 7. The bay of Saranda.



Fig. 8: Transforming of the Mediterranean vegetation by uninhibited construction activites.

*Alcea rosea*  
*Allium subhirsutum*  
*Anagallis arvensis* (red form)  
*Andropogon distachyos*  
*Asparagus acutifolius*  
*Asplenium cf. onopteris*  
*Avena cf. sterilis*  
*Bituminaria bituminosa*  
*Briza maxima*  
*Capsella bursa-pastoris*  
*Catapodium rigidum*  
*Crithmum maritimum*  
*Dactylis glomerata* ssp. *hispanica*  
*Dichondra micrantha*  
 Growing along lawn edges and in flower beds.  
 Not yet mentioned by VANGJELI (2015) or by PILS (2016).  
*Dittrichia viscosa*  
*Dorycnium hirsutum*  
*Ecballium elaterium*  
*Echium plantagineum*  
*Ephedra foemina* (= *E. campylopoda*)  
*Euphorbia peplus*  
*Ficus carica*  
*Fumaria capreolata*  
*Galactites tomentosa*  
*Geranium brutium*  
*Geranium lucidum* (moist and shaded walls)  
*Geranium purpureum*  
*Hirschfeldia incana*  
*Hordeum leporinum*

*Jacobsaea maritima* (Running wild in the neighbourhood of cultivation. Not mentioned by VANGJELI (2015) or by PILS (2016).  
*Lactuca serriola*  
*Malva sylvestris*  
*Mercurialis annua*  
*Muscari spec.*  
*Onopordum illyricum* (castle)  
*Ornithogalum narbonense*  
*Osyris alba*  
*Paliurus spina-christi*  
*Papaver rhoes*  
*Parietaria judaica* (growing on walls)  
*Parthenocissus [inserta or quinquefolia]* epiphyte on *Phoenix canariensis*  
*Phillyrea latifolia*  
*Piptatherum miliaceum*  
*Plantago major* subsp. *major*  
*Platanus orientalis*  
*Polycarpon tetraphyllum* subsp. *tetraphyllum*  
*Potentilla reptans*  
*Quercus coccifera*  
*Ricinus communis*  
*Rosa sempervirens*  
*Rumex pulcher*  
*Salvia fruticosa*  
*Sambucus ebulus*  
*Sambucus nigra*  
*Scolymus hispanicus*  
*Silene vulgaris* subsp. *vulgaris*  
*Sisymbrium officinale*

*Smilax aspera*  
*Solanum nigrum*  
*Sonchus oleraceus*  
*Spartium junceum*  
*Stachys* cf. *germanica* or *Stachys cretica* (see PILS [2016]: p.109)  
*Stellaria media*  
*Sympotrichum squamatum* (=*Aster squamatus*)

*Tordylium apulum*  
*Tropaeolum majus*  
*Umbilicus horizontalis*  
*Verbascum sinuatum*  
*Verbascum macrurum*  
*Vicia sativa*  
*Xanthium* cf. *orientale* subsp. *italicum*

Cultivated trees and shrubs (among others):

*Justicia adhatoda*  
*Nerium oleander*  
*Phoenix canariensis*

*Platanus orientalis*  
*Callistemon citrinus*

## Tirana

Tirana (Tiranë) was founded in 1614. The region is however settled earlier. In 1920 Tirana was proclaimed as capital of Albania. Its number of inhabitants is between 557.000 and 625.000 according to differing sources. It lies in the Mediterranean climate, about 100 m above sea. The vegetation reflects the remarkably high mean annual precipitation (1265 mm).



Fig. 9: View at Tirana.



Fig. 12: Urban greening in the centre of Tirana.

*Acer negundo*  
*Ailanthus altissima*  
*Anagallis arvensis*  
*Antirrhinum majus* (on roofs)  
*Artemisia verlotiorum*  
*Arum italicum*  
*Arundo donax*  
*Asparagus acutifolius*  
*Bellis perennis*  
*Brassica napus*  
*Bromus hordeaceus*  
*Bromus madritensis*

*Bunias erucago*  
*Capsella bursa-pastoris*  
*Carduus pycnocephalus*  
*Carlina corymbosa*  
*Catapodium rigidum*  
*Celtis australis*  
*Convolvulus arvensis*  
*Conyza bonariensis*  
*Cynodon dactylon*  
*Dactylis glomerata*  
*Descurainia sophia*

<i>Dichondra micrantha</i>	Growing along lawn edges and in flower beds. Not yet mentioned by VANGJELI (2015) or by PILS (2016).
<i>Dittrichia viscosa</i>	
<i>Dysphania ambrosioides</i>	
<i>Ficus carica</i>	
<i>Hirschfeldia incana</i>	
<i>Hordeum leporinum</i>	
<i>Hordeum murinum</i> s. l.	
<i>Humulus lupulus</i>	
<i>Lactuca serriola</i>	
<i>Lotus corniculatus</i>	
<i>Malva sylvestris</i>	
<i>Orlaya grandiflora</i>	
<i>Oxalis corniculata</i>	
<i>Paliurus spina-christi</i>	
<i>Plantago major</i> subsp. <i>major</i>	
<i>Platanus orientalis</i>	
<i>Poa annua</i>	
	<i>Potentilla reptans</i>
	<i>Pteridium aquilinum</i>
	<i>Punica granatum</i>
	<i>Robinia pseudoacacia</i>
	<i>Rorippa austriaca</i>
	<i>Rubus fruticosus</i> agg.
	<i>Rumex pulcher</i>
	<i>Sambucus ebulus</i>
	<i>Sherardia arvensis</i>
	<i>Sisymbrium officinale</i>
	<i>Sonchus oleraceus</i>
	<i>Sorghum halepense</i>
	<i>Spartium junceum</i>
	<i>Stellaria media</i>
	<i>Urtica dioica</i>
	<i>Verbascum sinuatum</i>
	<i>Veronica peregrina</i>

Trees and shrubs cultivated in parks or along streets in Tirana:

Tirana is situated in the plant hardiness zone 9 which enables the cultivation of many trees and shrubs.

<i>Acer negundo</i>	<i>Olea europaea</i>
<i>Aesculus flava</i>	<i>Paliurus spina-christi</i>
<i>Aesculus hippocastanum</i>	<i>Parthenocissus quinquefolia</i> (and/or <i>Parthenocissus inserta?</i> )
<i>Ailanthus altissima</i>	<i>Phoenix canariensis</i>
<i>Buxus sempervirens</i>	<i>Pinus pinea</i>
<i>Cedrus cf. atlantica</i>	<i>Pittosporum tobira</i>
<i>Cedrus deodara</i>	<i>Platanus orientalis</i>
<i>Celtis australis</i>	<i>Platanus x hispanica</i>
<i>Cercis siliquastrum</i>	<i>Populus alba</i>
<i>Cupressus sempervirens</i>	<i>Populus nigra</i> var. <i>italica</i>
<i>Eleagnus angustifolia</i>	<i>Punica granatum</i>
<i>Eucalyptus camaldulensis</i>	<i>Quercus ilex</i>
<i>Ficus carica</i>	<i>Robinia pseudoacacia</i>
<i>Hedera helix</i> (variegated cultivars)	<i>Tilia tomentosa</i>
<i>Ligustrum lucidum</i>	<i>Trachelospermum jasminoides</i>
<i>Magnolia grandiflora</i>	
<i>Nandina domestica</i>	
<i>Nerium olerander</i>	

## Vlora

Vlora (Vlorë) is a port city in southern Albania with a long tradition of settlement since the antiquity. Vlora became temporarily capital of Albania after the declaration of independence in 1912.



Fig. 11: Vlora.

Fig. 12: Pond with *Phragmitetea* in an excavation pit.

- Allium cf. roseum*  
*Anagallis arvensis* (blue sepals)  
*Artemisia verlotiorum*  
*Arum italicum*  
*Brassica napus*  
*Bromus madritensis*  
*Calystegia* spec.  
*Capparis* spec. (walls of mosque)  
*Capsella bursa-pastoris*  
*Chenopodium murale*  
*Cichorium intybus*  
*Cirsium vulgare*  
*Consolida orientalis*  
*Convolvulus arvensis*  
*Coronopus didymus*  
*Cynodon dactylon*  
*Dasypyrum villosum*  
*Dysphania ambrosioides*  
*Eucalyptus camaldulensis* juv.  
*Euphorbia helioscopia*  
*Euphorbia peplus*  
*Ficus carica*  
*Galium aparine*  
*Glebionis coronaria*  
*Hirschfeldia incana*  
*Holoschoenus vulgaris*  
*Hordeum leporinum*  
*Lactuca serriola*  
*Lavatera cretica*
- Lophochloa cristata*  
*Malva parviflora*  
*Malva sylvestris*  
*Matricaria recutita*  
*Medicago lupulina*  
*Melilotus* spec.  
*Mentha cf. longifolia*  
*Mercurialis annua*  
*Oryzopsis miliacea*  
*Oxalis corniculata*  
*Parietaria judaica* (roof of mosque)  
*Plantago cf. lanceolata*  
*Plantago major* subsp. *major*  
*Poa annua*  
*Poa trivialis*  
*Polygonum aviculare*  
*Potentilla reptans*  
*Ranunculus muricatus*  
*Sisymbrium officinale*  
*Sonchus oleraceus*  
*Sympyotrichum squamatum*  
*Trifolium repens*  
*Triticum aestivum*  
*Typha* spec.  
*Verbascum sinuatum*  
*Vicia lutea*  
*Xanthium orientale* subsp. *italicum*

Cultivated trees and shrubs:

<i>Acer negundo</i>	<i>Platanus orientalis</i>
<i>Cupressus sempervirens</i>	<i>Populus alba</i>
<i>Eucalyptus camaldulensis</i>	<i>Populus nigra</i> var. <i>italica</i>
<i>Magnolia grandiflora</i>	<i>Punica granatum</i>
<i>Melia azedarach</i>	<i>Phoenix canariensis</i> with the epiphytes: <i>Conyza sumatrensis</i> , <i>Ficus carica</i> , <i>Sonchus oleraceus</i> , <i>Oryzopsis miliaceum</i> .
<i>Morus alba</i>	
<i>Pinus pinea</i>	

Literature:

- GUTZWEILER, M. (2022): Albanien. 4. Aufl. – Bielefeld, 647 S.  
PILS, G. (2016): Illustrated flora of Albania. – St. Stefan (Austria), 576 S.  
VANGJELI, J. (2015): Excursion flora of Albania. – Königstein, 662 S.

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