# Flowers of Italy's Gargano Peninsula

Naturetrek Tour Report

21 - 28 April 2014



Report compiled by Andrew Cleave MBE & Jessica Turner Images courtesy of Richard Capon



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# Summary

We experienced a week of variable weather, with some spells of pleasant sunshine, but also some spells of rain and one spectacular thunderstorm. In Monte Sant'Angelo there was some low cloud and brisk winds to contend with, but near the coast we enjoyed sunny conditions which brought many insects onto the wing. The orchids were present in good numbers this year with over 40 species and a few hybrids found, but we also had plenty of time to study some of the other rich flora of the region, with some colourful displays of Irises, Poet's Narcissi, Anemones and Cyclamens in the woodlands and roadsides lined with Giant Fennel, Common Mallow and Crown Daisies. We found many other Mediterranean species, including some Gargano endemics, and a number of British rarities. Butterflies recorded during the week included a few familiar British species such as Wall Brown and Small Heath, but we also saw and photographed Swallowtail, Scarce Swallowtail, various blues and a variety of 'whites' including the attractive Eastern Dappled White. Italian Wall Lizards were seen on sunny days, some basking and allowing photographs, but most dashing for cover as soon as they were spotted. Our short bird-watching stop at the disused salt-pans on the coast gave us some good views of a number of waders and other wetland species, and we saw and heard many more typical Mediterranean birds during the week, such as the Serins in the conifers outside the hotel, Sub-alpine Warblers in most bushy areas and Cirl Buntings on open hillsides.

### Day 1

# Monday 21st April

Weather: Heavy rain in the morning but clearing later. Low cloud at Monte Sant'Angelo. 19°C

Andrew and Jessica had just said goodbye to the first Naturetrek 2014 group when the second group was arriving at Bari airport. David and Geoff were already in Bari so once everyone had their luggage we were able to get loaded up and set off.

The first length of the journey took us along the auto-route through flat agricultural land where we passed the large areas of olive plantations and market gardens of the lowland areas. We then headed for the coast along minor roads lined with colourful displays of Crown Daisies, Mallows, Poppies and Giant Fennel. There were a few sightings of Marsh Harrier and Lesser Kestrel as we neared the coast. We stopped off at an area of derelict salt-pans and muddy creeks near a deserted beach where we found some typical coastal plants such as Sea Rocket. Yellow-legged Gulls, Little Egrets and Greater Flamingos were present on the salt pans, and a few Kentish Plovers were feeding on the beach. Mediterranean Gulls were seen on the marsh, and offshore there were a number of Slender-billed Gulls feeding in the choppy sea. After a pleasant break here we continued our journey to Monte Sant'Angelo, climbing up and up until we were in the clouds. Once everyone had settled in we had a brief gathering and briefing session before our evening meal.

### Day 2

### **Tuesday 22nd April**

### Weather: A sunny day, but a little cloudy by the evening. 22°C

We all met up again at breakfast and then Andrew and Jessica went to the supermarket lunch supplies. We were ready to leave the hotel 09 15 and our first experience of the Gargano flora was at the side of the road, only a few minutes drive from the hotel, along the road leading to the Pulsano Monastery. Sharp eyes spotted the first orchids on the roadside, including the tiny form of the Yellow Bee Orchid, *Ophrys sicula*, and the endemic derivative of the Early Spider Orchid *Ophrys garganica*. Working our way carefully over the grassy hillside, many more orchid species were found, growing amongst the bright yellow flowers of Alyssum *Alyssum saxatile* and Horseshoe Vetch *Hippocrepis comosa*. The most easily spotted orchid was the Pink Butterfly Orchid *Anacamptis* (*Orchis) papilionacea*, and all around were spikes of the Green-veined Orchid *Anacamptis* (*Orchis) morio*, showing some variation in form and colour, although most of them were past their best by now. We were also able to find one or two of the hybrids between these two species.

Further up the slope the prickly cushions of the Spiny Spurge *Enphorbia spinosa* were bright with yellow flowers and were honey-scented. More of the variants of the Early Spider Orchid *Ophrys sphegodes* were found on the higher slopes and there was plenty of time for the photographers to choose the best specimens and concentrate and getting good shots. We added specimens of Bertoloni's Bee Orchid *Ophrys bertolonii*, and *Ophrys promontorii* to the list before it was time to leave this very rich site. Moving further along the road, we parked beside a copse of Hornbeams and checked the slopes on either side of the road leading up to a radio mast. Here we added Milky Orchids *Neotinea (Orchis) lactea* to the list as well as more Ophrys species and many more Man Orchids *Orchis anthropophorum.* The attractive hybrid between Man and Naked Man orchid *Orchis x bivonae* was also found here. Several buds of Lady Orchids were spotted and a few were just starting to open. This was a convenient spot for our first picnic lunch and we were able to enjoy some local produce and wines.

We then drove further along the road to the Monastery, through large stands of Common Asphodel, and flowering Almond-leaved Pear *Pyrus amygdaliformis* trees along the way. The walls of the monastery supported some interesting species, including the poisonous Henbane *Hyoscyamus niger*, and we looked for the endemic Pale Goldendrops *Onosma lucana* in its usual site on the edge of the gorge, finding a few non-flowering plants on the rocks below the large cross. The three species of Asphodel all grow in the same spot here, and we also found a few plants of Ground Pine *Ajuga chamaepitys* close to the monastery.

We explored the extensive grottos and then took a slow walk down the wide track behind the monastery where, despite some minor road-works we found a colony of Bumble-bee Orchids *Ophrys hombyliflora* and some very fine Late Spider Orchids *Ophrys fuciflora* and the endemic *Ophrys apulica*. It was tempting to go on and on, along the gentle slope, and we found a few good plants of *Onosma lucana* on the rock face beside the road. Eventually it was time for us to leave this peaceful spot and we returned to the hotel for our evening meal and a get-together to discuss our finds.

# Day 3

# Wednesday 23rd April

### Weather: A cold grey day with rain at times. 9°C

After Andrew and Jessica had returned from the supermarket we loaded up and took the road out of town towards San Giovanni Rotondo. Our first stop was in the valley below Monte Sant'Angelo where we searched the margins of the cultivated fields alongside the road hoping to find Wild Tulips. A few were just visible among the crops but we did not venture far into the fields. As well as the remains of Winter Aconite *Eranthis hyemalis* there were some other interesting 'cornfield weeds' growing in bare patches which are now very rare in Britain.

The next roadside stop, a few miles further on, enabled us to find more of *Ophrys* species, including several specimens of the very confusing Early Spider Orchid *Ophrys sphegodes* group. Some patches of Irises, *Iris lutescens* were seen on the rough ground near the road and around the parking area. The flatter area adjacent to the parking area was covered in orchids, especially *Orchis italica* and we added some more species to the list, including some Giant Orchids *Himantoglossum robertianum*, almost over but still showing some flowers, and some tiny Burnt Orchids *Neotinea ustulata*. There were many non-flowering spikes of Lizard Orchid *Himantoglossum hircinum* in the same area. A short walk towards a little grove of oak trees produced some of the endemic Violas *Viola heterophylla ssp graeca*.

Driving on a short distance towards the forest enabled us to find one or two wild Peonies *Paeonia mascula* on steep bank; some more were seen in bud but were surrounded by dense scrub. The road into the forest gradually turned into a stony track as it climbed the hillside, with steep banks lined with ferns and mosses; we spotted large stands of narcissi and anemones flowering in several places. We stopped for a picnic in a distant clearing in the woods where picnic tables had been provided. Here a few Roman Orchids *Dactylorhiza romana* and other woodland species were found and photographed.

After our picnic we set off to walk through the forest and eventually came to a more open hillside where *Irislutescens* and *Iris pseudopumila* were flowering in profusion and other sun-loving species were found amongst the rocks. Some showy plants of the Spectacled Ophrys *Ophrys biscutella* were found here, and Round-leaved Birthwort *Aristolochia rotundifolia* was abundant in the shady spots. Some Morel fungi *Morchellus esculentus* were seen alongside the track, Coral-root Bittercress *Cardamine bulbifera* and Bird-in-a-bush *Corydalis solida* were scattered through the woods.

On returning to the vehicles we drove slowly out of the forest, stopping to photograph the Narcissi at one spot where they were protected from grazing behind a fence. We arrived back at the hotel in time for some of the group to explore the town before our evening get-together.

### Day 4

# Thursday 24th April

### Weather: Low cloud with drizzle at times. Occasional clear spells 11°C

Today we set off to visit the famous botanical site of Monte Sacro, and took waterproofs and warm clothing because of the rather threatening conditions. We stopped at the local supermarket for lunch provisions on the way. The route to Mattinata involves a long drive down a scenic road made up of almost continuous hairpin bends, but with sweeping views of the Gargano landscape, including Monte Sacro, and the coast far below. We stopped beside the road at one point to admire the views and then took a short walk along the terraced hillside beneath the olive trees; this foray produced a few more species for the list including our first Tongue Orchids *Serapias lingua*, and the lemon-yellow flowers of the large daisy-like *Urospermum dalechampii*. A single plant of Weasel Snout *Misopates orontium* was still in flower, having been spotted there the previous week.

Mattinata is by-passed with tunnels, underpasses and roundabouts, through an area of ancient olive trees, before another very steep road with yet more hairpin bends leads to the starting point for a walk up Monte Sacro. This is a very well-known stony hill, a site of pilgrimage for some, with a rich flora. A well-trodden and way-marked path leads to the summit of the hill where there are the ruins of a monastery, but there is so much to see on the way that most of the party got no further than the pine forest. A new species for the list was the Dense Flowered Orchid *Neotinea maculata*, and in addition there were a few Spectacled Orchids *Ophrys biscutella*. More Man Orchids and Naked Man Orchids *Orchis italica were* seen amongst the rocks including one or two of the hybrid. Just before reaching the woodland on the steep slope a large patch of Sparse-flowered Orchids *Orchis pauciflora* and Four-spotted Orchids *Orchis quadripunctata* were found, plus a single spike of Violet Limodore *Limodorum abortivum*, no nearer to opening than when it had been found the previous week.

We had our picnic back at the minibuses and then retraced our route with a stop along the way to check out another interesting open area where in the previous week we found Earth-star Fungi scattered amongst the rocks. After driving back around Mattinata we stopped at the start of the track to Monte Saraceno, a large limestone outcrop and historical site overlooking the sea. Our walk along the track produced two species of Cistus (*C. salvifolius*, and *C. monspeliensis*) growing in close proximity which made for easy identification. More orchids, including *Ophrys melena* were found along the track. The dozens of chambered tombs at the end of the headland, dating from about 1000BC, and carved out of the solid limestone, proved to be very interesting, and some of them supported colonies of Maidenhair Fern *Adiantum capillus-veneris*. White Horehound *Marrubium vulgare* and the related *Marrubium alysson* were both abundant near the ruined buildings on the headland, and several species of Broomrape *Orobanche spp* were found around the tombs.

We returned to the hotel after another full day, and some of our party still explored the town again before our evening get-together.

### Day 5

# Friday 25th April

### Weather: A sunny day with showers later. 12°

We had a slightly delayed start today in order to allow some time for a further look around the town and visit the Castle book shop. Andrew and Jessica moved the mini-buses around so that there was a bus at the top and bottom of the Pilgrim's Path.

We then all met at the front of the hotel and took the Pilgrim's Path down from the Castle to the valley below. This ancient path led us along the hillside with more orchids and other flora to see on the grassy banks on either side, and lovely views of the valley and distant hillsides. A few Lady Orchids were spotted with more flowers open and we found the tiny Spring Rock-cress *Arabis verna* and the endemic sub-species of Aubrieta. Having reached the bottom of the path, and retrieved the second minibus, we continued to the forested slopes below Monte Calvo, the highest peak in the Gargano.

We stopped at a picnic area, and prepared our food in the back of the two minibuses. After our lunch we explored the forest; here there were colourful displays of *Anemone apennina*, *Narcissus poeticus* and *Euphorbia amygdaloides*. A few Roman Orchids *Dactylorhiza romana* were found, with a single specimen of Elder-flowered Orchid *Dactylorhiza sambucina*. We returned to the minibuses and followed the road through the forest into an area of small fields and hedgerows where we saw many more Roman Orchids. Our last stop of the day was near an isolated restaurant, where we wandered around some neglected gardens and un-inhabited houses looking for more orchids in the clearings. We found plenty of Roman Orchids here, and lots of leaves and tight buds of the Common Spotted Orchid *Dactylorhiza fuchsii*, and Greater Butterfly Orchid *Platanthera chlorantha*. One of the trees spreading freely in this area was the Wild Service Tree *Sorbus torminalis*, growing amongst Aspen *Populus tremulus* and Sycamore *Acer pseudoplatanus*. We then followed the road back to Monte Sant'Angelo.

# Day 6

# Saturday 26th April

### Weather: Mostly cloudy but some sunny spells. 20°C

We left the Palace Hotel this morning and head for our second hotel near the coast so our route there took us into the Foresta Umbra, the "shady forest" which is composed largely of dense groves of mature beech and hornbeam trees. Our first stop of the day was at a little track which led into a plantation of pines where there were many of the now familiar orchids in flower, including some very fine displays of Italian Man Orchids *Orchis italica* and more of the various 'Bee' orchids, including the endemic *Ophrys promontorii* and some possible hybrids. We stopped beside the road at a spot we had been told about by some other English botanists staying at our hotel. After a scramble through a fence we discovered some fields filled with Roman and Green-winged Orchids, including one very unusual red colour-form of the Roman Orchid.

We then made our way on through the forest to a roadside picnic spot which gave us the opportunity for a walk along an easy trail where there were many luxuriant ferns and the large leafy lichen, Tree Lungwort *Lobaria pulmonaria* on the trunks of trees along the path. Various garlic-scented species were encountered, including the British native, Ramsons *Allium ursinum*. The landscape here was deeply pitted with huge hollows which apparently are collapsed caves. At a little woodland lake several terrapins were spotted basking along a fallen tree, and large numbers of tadpoles were seen, although few birds were seen.

After another lunch of local produce we continued driving along the forest road, pausing to look at some Fallow Deer in an enclosure. At a lay-by several kilometres down the hill we stopped to look at a large area of delicately-scented Spring Cyclamen *Cyclamen repandum* growing on steep slopes, where there were a few British native species as well, including Fiddle Dock *Rumex pulcher* and Stinking Iris *Iris foetidissima*. On the opposite side of the road Scorpion Vetch was cascading down the bank and a few shrubs of *Daphne sericea* were also found.

We arrived at the drier coastal plains, driving through Olive and Citrus groves before we stopped at the not-soscenic "Fly-tip Stop" where we found many more *Ophrys* and *Serapias* species. There was some evidence of trampling and grazing by cattle here which had reduced the number of species we usually find at this spot. The last stage of our journey led us to the fishing harbour of Peschici where we checked in to the Hotel Elisa, our base for the final two nights of the trip. After checking in most of the group explored the town and harbour, enjoying the views of the sea and sampling the ice-creams. Our evening meal was the hotel's speciality local seafood, freshly prepared by the proprietor.

### Day 7

# Sunday 27th April

### Weather: A warm and sunny day, but with thunder and heavy rain later. 22°C

The morning was bright and sunny and several of the group enjoyed a pre-breakfast walk along the shore. After breakfast we drove west out of Peschici, along more steep and twisting roads, making our first stop to look down over the cliffs at the Trabucco – the complicated arrangement of nets and poles traditionally used to catch fish from the rocks. From this high viewpoint we had excellent views of the coastline and found a few more interesting plants, including the prickly shrub, Apple of Sodom *Solanum sodomaeum*. More twists and turns in the road led us up the hill past extensive olive groves, one of which supported a lovely stand of Lady Orchids where we were able to get close to the largest orchids we had seen all week.

We eventually reached a highway which enabled us to travel rapidly to the west of the peninsula. Here we headed inland to explore the Bosco di Spinapulci - "Forest of the Spiny Flea", a high limestone plateau with forests and meadows and a few pot-holed roads. Before climbing up on the plateau we stopped at a site where the elegant purple Mullein *Verbascum phoenicium*, was flowering, and close by we found Honeywort *Cerinthe major* and wild Asparagus, the plant which we had noted on sale in buckets on the roadsides on our journey. A few Pyramidal Orchids *Anacamptis pyramidalis* were just starting to open up, and yet more of the *Ophrys sphegodes* group were found along the lane with a few good spikes of the Dark Ophrys *Ophrys sphegodes subsp. atrata (incubacea)*. Both Subalpine and Sardinian Warblers were calling in the scrub alongside the road. Further on we stopped in a disused quarry; more of the Spring Cyclamen was in flower here , and the two new orchid species noted were the very rare Small-patterned Ophrys *Ophrys parvimaculata* and the Provence Orchid *Orchis provincialis*, both growing in very rocky ground with thorny shrubs overhead. More Dense-flowered Orchids were found and various prickly shrubs, especially the aptly named Christ's Thorn *Palliurus spina-christi* made us take extra care when moving around.

We then drove up onto the limestone plateau on a steep and pot-holed track where our picnic spot overlooking the wooded valleys on either side was a good vantage point for exploring this area. More orchids were found in the woods, and there were still more Cyclamens here. We searched for one of the specialities of this area and several spikes of the magnificent Heart-flowered Serapias *Serapias cordigera* were found, plus a few good specimens of Bug Orchid *Anacamptis (Orchis) coriophora* and more of the Small-patterned Ophrys. After lunch we wandered a short way along the deserted road checking on the butterflies and various beetles visiting flowers, and some of the group managed to photograph an Ascalaphid, before returning to the mini-buses for the drive back to Peschici. We arrived there just as the heavens opened; so some of us had to shelter in the garage and forgo the ice-cream break. Our final evening meal in Peschici was another delicious selection of the local seafood.

# Day 8

# Monday 28th April

### Weather: Heavy rain at first, but clearing later. 18°C

This morning we had to pack up and leave for the airport, as this was the end of our stay in Gargano, so we had an early breakfast and left Peschici soon after 8.0 am, retracing our steps up the hill past the olive groves before reaching the auto-route which led back to Bari. This gave us a final view of the limestone massif of Gargano, some of the limestone quarries and the roadsides filled with wild flowers, before we reached the coastal plains and the agricultural zone.

Light traffic and good weather enabled us to have plenty of time for a break at a service station before arriving at the airport to check-in. Here we said our goodbyes to Alan and Mary who were going to extend their stay for another week, and to Geoff who was travelling elsewhere in Italy. We had an uneventful journey back to Gatwick where we said our fond farewells.

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# **Species List**

Plants (\* indicates that a species is endemic)

Scientific name	Common name	Location
PTERIDOPHYTES	FERNS & ALLIES	
Selaginellaceae	Lesser Clubmoss Family	
Selaginella denticulata	Mediterranean Clubmoss	On rocks, Monte Sacro, Bosco di Spina Pulc
Adiantaceae	Maidenhair Fern Family	
Adiantum capillus-veneris	Maidenhair Fern	In tombs, Monte Saraceno
Aspleniaceae	Spleenwort family	
Asplenium adiantum-nigrum	Black Spleenwort	On rocks and walls, shady sites, widespread
Asplenium ceterach	Rustyback	On sunny rocks and walls, frequent.
Asplenium trichomanes	Maidenhair Spleenwort	On rocks and walls, shady sites, common.
Phyllitis scolopendrium	Hart's-tongue Fern	Shaded sites, woodlands.
Athyriaceae	Lady fern Family	
Cystopteris fragilis	Brittle Bladder-fern	Foresta Umbra
Dennstaeditiaceae	Bracken Family	
Pteridium aquilinum	Bracken	roadsides near Monte Sacro
Dryopteridaceae	Buckler-fern Family	
Dryopteris dilatata	Broad Buckler-fern	Foresta Umbra
Polystichum setiferum	Soft-shield Fern	Cyclamen site
PINOPSIDA (GYMNOSPERMS)	CONIFERS	
Cupressaceae	Juniper Family	
Cupressus sempervirens	Italian Cypress	Widespread, gardens, roadsides.
Juniperus oxycedrus	Prickly Juniper	Open, stony hillsides, common.
Juniperus phoenicea	Phoenicean Juniper	Peschici
Pinaceae	Pine Family	
Pinus halepensis	Aleppo Pine	Monte Saraceno
Pinus pinaster	Maritime Pine	Widespread
Pinus pinea	Stone or Umbrella Pine	Planted along roadsides, lowland areas.
Taxaceae	Yew Family	
Taxus baccata	Yew	Bosco Quarto, Foresta Umbra
MAGNOLIOPSIDA (ANGIOSPERMS)	FLOWERING PLANTS	
Magnoliidae (D	licotyledons)	
Acanthaceae	Bear's-breech Family	
Acanthus mollis	Bear's-breech	Leaves only, Monte Saraceno area
Aceraceae	Maple Family	
Acer campestris	Field Maple	Widespread, woodlands.

Acer pseudoplatanus Acer obtusatum Acer opalus

Aizoaceae Carpobrotus acinaciiformis

### Anacardiaceae

Cotinus coggygria Pistacia lentiscus Pistacia terebinthus

#### Apiaceae

Conium maculatum Daucus carota Eryngium campestre Ferrula communis Laserpitium latifolium Orlaya grandiflora Petroselinum crispum Sanicula europaea Scandix pecten-veneris Seseli montanum Smyrnium perfoliatum Smyrnium rotundifolium Thapsia garganica Tordylium apulum Torilis arvensis

#### Apocynaceae

Nerium oleander Vinca major

#### Aquifoliaceae Ilex aquifolium

**Aralaceae** Hedera helix

**Aristolochiaceae** Aristolochia rotunda Aristolochia pallida

Asclepiadaceae Vincetoxicum hirundinaria

Asteraceae Achillea millefolium Andryala integrifolia Artemisia absinthium Bellis perennis Bellis sylvestris Calendula arvensis

#### Common name

Sycamore Bosnian Maple Italian Maple

Dew-plant Family Sally-my-handsome

Sumach Family Smoke Tree Mastic Tree Turpentine Tree

#### **Carrot Family**

Hemlock Wild Carrot Field Eryngo Giant Fennel Broad-leaved Sermountain Orlaya Parsley Sanicle Shepherd's Needles A Seseli Perfoliate Alexanders Round-leaved Alexanders Thapsia Tordylium Spreading Hedge Parsley

Periwinkle Family Oleander Periwinkle

Holly Family Holly

Ivy Family Ivy

**Birthwort Family** A Birthwort A Birthwort

Milkweed Family Swallow-wort

#### **Daisy Family**

Yarrow Andryala Wormwood Daisy Southern Daisy Field Marigold

#### Location

Widespread, woodlands. Monte Sacro Monte Sant'Angelo

Peschici, on walls

nr Peschici Widespread in open, stony sites, hillsides Pulsano Gorge, Bosco di Spina Pulci

Roadsides, lay-bys. Roadsides, lay-bys. Leaves only, open ground, stony hillsides Widespread along roadsides, mostly coastal Leaves only, Pilgrim's Path Widespread in open, stony areas Monte Saraceno Foresta Umbra Widespread, field margins, stony areas. Pulsano Monastery Monte Sacro, Pulsano Bosco di Spina Pulci leaves only, open stony areas Olive grove nr Mattinata Roadsides, lay-bys.

Pulsano Monastery, planted below Monte Calvo

Common in woodlands

Widespread

Bosca da Spina Pulci, Bosco Quarto below Monte Calvo

Leaves only,

Leaves only Leaves and tight buds only, widespread Roadside stop Widespread in grassy areas and fields Widespread in woodlands and hillsides Abundant on roadsides, field margins

Carduus chrysacanthus Centaurea diomedea Centaurea jacea Cirsium eriophorum Crepis rubra Crupina crupinastrum Dittrichia viscosa Doronicum columnae Evax pygmaea Galactites tomentosa Glebionis (Chrysanthemum) coronarium Glebionis (Chrysanthemum) segetum Helichrysum stoechas Hyoseris radiata Inula verbascifolia\* Jurinea mollis Matricaria recutita Pallenis spinosa Phagnalon rupestre Ptilostemon gnaphaloides Reichardia tingitana Rhagadolius stellatus Scorzonera laciniata Scorzonera villosa Senecio gallicus Senecio vulgaris Silybum marianum Sonchus asper Taraxacum agg. Tragopogon crocifolius Tragopogon porrifolius Tragopogon sinuatus Tripleurospermum inodoratum Tussilago farfara Urospermum dalechampii Urospermum picroides

#### Betulaceae

Betula pendula Corylus avellana Carpinus orientalis Ostrya carpinifolia

#### Boraginaceae

Alkanna tinctoria (lehmanii) Anchusa caerulea Anchusa cretica Anchusa azurea (italica) Borago officinalis Buglossoides (Lithospermum) arvense Buglossoides (L.) purpurocaerulea Cerinthe major Cynoglossum creticum

#### Common name

Apennine Thistle A fine-leaved Knapweed Brown Knapweed Woolly Thistle Pink Hawksbeard Crupina Stink Aster Heart-leaved Leopard's-bane Evax Galactites Crown Daisy Corn Marigold Curry Plant a 'dandelion' a 'Ploughman's Spikenard' type a 'soft' Thistle Scented Mayweed Pallenis Phagnalon a Ptilostemon Star Hawkbit Cut-leaved Viper's-grass Hairy Viper's Grass Groundsel Milk Thistle **Prickly Sow-thistle** a Dandelion Salsify Scentless Mayweed Colt's-foot Urospermum

#### **Birch Family**

Silver Birch Hazel Eastern Hornbeam Hop Hornbeam

#### Forget-me-not Family

Dyer's Alkanet --Large Blue Alkanet Borage Corn Gromwell Purple Gromwell Honeywort Cretan Hound's-tongue

#### Location

Leaves only Monte Saraceno Monte Saraceno Leaves only Widespread in sunny sites, roadsides Leaves and buds only coastal roadside stops Woodlands and shady banks Common on open stony sites Leaves only Abundant on roadsides, field margins, coastal Local in some cultivated fields Pulsano Gorge Widespread in grassy areas and fields Monte Saraceno (in leaf) Leaves and buds only Mullein stop area Mullein stop Pulsano Gorge Pulsano Gorge Roadside stop Pulsano Gorge Mullein stop bosco di spina pulci Monte Sacro area Tulip fields Widespread, roadsides, Pulsano Monastery **Tulip fields** Roadsides and labys ? Mullein stop and other roadsides ? Roadsides and lay-bys Leaves only near Quarry stop Pulsano area, olive grove stop Orchid stop near Bosco Quarto

Monte Sant'Angelo - Pilgrim's Path Forest Umbra Monte Calvo Bosco Quarto

abundant on slopes below Monte Sant'Angelo Pulsano area Bosco di Spina Pulci, Bosco Quarto nr Fly-tip stop Pulsano area Tulip fields Pulsano area Olive groves nr Peschici, Mullein stop Orchid stop nr Bosco Quarto

Echium italicum Echium platagineum Myosotis arvensis Myosotis discolor Myosotis ramosissima Myosotis sylvatica Onosma (lucana\*) echioides Pulmonaria montana Pulmonaria officinalis

#### Brassicaceae

Aethionema saxatile Alliaria petiolata Aurinia (Alyssum) saxatile Aurinia (Alyssoides) sinuata Arabis caucasica Arabis hirsuta Arabis turrita Arabis verna Aubrieta columnae subsp. italica Biscutella didyma Bunias erucago Cakile maritima Capsella bursa-pastoris Cardamine bulbifera Cardamine plumieri Cheiranthus cheiri Descurainia sophia Diplotaxis sp. Eruca sativa Fourraea alpina Hirschfeldia incana Isatis tinctoria Lepidium (Cardaria) draba Lepidium latifolium Lobularia maritima Matthiola incana Raphanes raphanistrum Sinapis alba Sinapis arvensis Sisymbrium officinale Thlaspi praecox

**Cactaceae** Opuntia ficus-indica

#### Campanulaceae

Campanula garganica\* Legousia falcata Legousia speculum-veneris

Caprifoliaceae Lonicera etrusca

#### Common name

Pale Bugloss Purple Viper's Bugloss Field Forget-me-not Changing Forget-me-not Early Forget-me-not Wood Forget-me-not Pale Goldendrops Mountain Lungwort Common Lungwort

#### **Cabbage Family**

Burnt Candytuft Garlic Mustard Yellow Alyssum Alyssoides Garden Rockcress Hairy Rockcress **Tower Mustard** Spring Rockcress an Aubrieta **Biscutella** Bunias/Warty Cabbage Sea Rocket Shepherd's Purse **Coralroot Bittercress Ivy-leaved Bittercress** Wallflower Flixweed A Wall-rocket Wild Rocket a small rock cress Hoary Mustard Woad Hoary Cress Dittander Sweet Alison Hoary Stock Wild Radish Charlock White Mustard Hedge Mustard A Penny-cress

Cactus Family Prickly Pear

#### **Bellflower Family**

a Bellflower (endemic) Spicate Venus's Looking Glass Large Venus's Looking Glass

Honeysuckle Family Etruscan Honeysuckle

#### Location

Roadside stop Widespread on coastal sandy areas Tulip fields and other grassy areas Pulsano area Pilgrim's Path Bosco Quarto, Foresta Umbra Pulsano monastery and gorge Bosco Quarto, Foresta Umbra Bosco Quarto

Bosco Quarto iris slopes roadsides and lay-bys, Cyclamen stop widespread in open, sunny areas walls of Pulsano monastery abundant on cliffs below Monte Sant'Angelo Pilgrim's Path roadsides Pilgrim's Path and Monte Sacro Monte Sant'Angelo and Pilgrim's Path widespread nr Tulip fields coastal sands nr Zapponeta Tulip fields Bosco Quarto and Foresta Umbra Bosco Quarto and Foresta Umbra Pulsano Monasterv roadsides and lay-bys Pulsano Monastery Pulsano area Bosco Quarto iris slopes common on roadsides and field margins widespread on roadsides nr Peschici nr Peschici Pulsano area Peschici cliffs and Zapponeta nr Mullein stop Fields and cultivated areas Roadsides Roadsides **Tulip fields** 

around Mattinata

Peschici Mullein stop (week 2) ?

nr Mullein stop

Lonicera periclymenum Sambucus ebulus Sambucus nigra Viburnum opulus Viburnum tinus

#### Caryophyllaceae

Arenaria serpyllifolia Cerastium fontanum Cerastium glomeratum Herniaria (cinerea) Minuartia serpyllifolia Silene colorata Silene conica Silene gallica Silene gallica Silene italica Silene latifolia Silene vulgaris Spergularia rubra Stellaria media

**Celastraceae** Euonymus europaeus

#### Chenopodiaceae

Chenopodium album Salicornia sp Sueda (vera)

#### Cistaceae

Cistus creticus Cistus monspeliensis Cistus salvifolius Helianthemum apenninum Helianthemum oelandicum subsp.incanum Helianthemum nummularium Helianthemum salicifolium Tuberaria guttata

#### Convolvulaceae

Calystegia sepium Convolvulus althaeoides Convolvulus althaeoides subsp.tenuissimus Cuscuta epithymum

Cornaceae

Cornus sanguinea

**Crassulaceae** Sedum acre

#### Common name

Honeysuckle Dwarf Elder or Danewort Elder Wayfaring Tree Laurustinus

#### **Pink Family**

Thyme-leaved Sandwort Common Mouse-ear Sticky Mouse-ear Rupturewort A Sandwort a catchfly -Sand Catchfly Small-flowered Catchfly Italian Catchfly White Campion Bladder Campion Sand Spurrey Common Chickweed Wood Stitchwort

#### Spindle Family Spindle

#### **Goosefoot Family**

Fat Hen Glasswort Shrubby Seablite

### **Rock-rose Family**

Pink Cistus Narrow-leaved Cistus Sage-leaved Cistus White Rockrose Hoary Rockrose Rockrose Willow-leaved Rockrose Spotted Rockrose

#### **Bindweed Family**

Hedge Bindweed Mallow-leaved Bindweed a Mallow-leaved Bindweed Common Dodder

Dogwood Family Dogwood

Stonecrop Family Biting Stonecrop

#### Location

Foresta Umbra nr Peony stop woodland margins nr Monte Calvo Peschici

tulip fields quarry stop Monte Saraceno Monte Sacro area Monte Saraceno widespread - open sunny areas Monte Saraceno coastal sands nr Zapponeta Tulip fields Monte Saraceno roadside stop Peschici coastal sands nr Zapponeta Bosco Quarto

Pulsano Gorge

Pulsano monastery salt pans on coast salt pans on coast

roadsides, nr Mattinata and Peschici Monte Saraceno Monte Saraceno, Peschici Monte Sacro Pulsano area, Monte Sacro widespread Monte Sant'Angelo Monte Sacro

nr Tulip fields Roadsides and open, sunny areas ? Monte Calvo area

nr Peschici

Pulsano Gorge

Sedum rubens Sedum sediforme Sedum stellatum Umbilicus rupestris

*Cucurbitaceae* Ecballium elaterium Bryonia dioica

Dipsacaceae Dipsacus fullonum Lomelosia crenata subsp dalleportae\* Scabiosa ochroleuca Scabiosa sp.

**Ericaceae** Erica arborea

Euphorbiaceae Euphorbia amygdaloides Euphorbia biumbellata Euphorbia characias subsp.characias Euphorbia helioscopia Euphorbia myrsinites Euphorbia nicaeensis Euphorbia peplus Euphorbia segetalis Euphorbia spinosa Mercurialis annua Mercurialis perennis

#### Fabaceae

Anagyris foetida Anthyllis barba-jovis Anthyllis tetraphylla Anthyllis vulneraria agg Anthyllis vulneraria subsp. praepropera Astragalus echinatus Astragalus hamosus Astragalus monspessulanus Bituminaria (Psoralea) bituminosa Calycotome infesta Ceratonia siliqua Cercis siliquastrum Coronilla scorpioides Cytisus decumbens Cytisus spinescens Dorycnium hirsutum Hedysarum coronarium Hippocrepis comosa Hippocrepis emerus subsp. emeroides Hippocrepis glauca Hippocrepis unisiliquosa

#### Common name

Reddish Stonecrop

Starry Stonecrop Wall Pennywort

**Cucumber family** Squirting Cucumber White Bryony

**Teasel Family** Wild Teasel An endemic Scabious Yellow Scabious A Scabious

Heather Family Tree Heather

Spurge Family Wood Spurge Whorled Spurge Mediterranean Spurge Sun Spurge Broad-leaved Glaucous Spurge -Petty Spurge a 'hedgehog' plant (Spiny Spurge) Annual Mercury Dog's Mercury

#### **Pea Family**

Bean Trefoil Jupiter's Beard Bladder Vetch Kidney Vetch Mediterranean Kidney Vetch (Pink) a Milk Vetch a Milk Vetch False Vetch Pitch Trefoil Spiny Broom Carob Judas Tree Annual Scorpion Vetch Prostrate Broom a Hairy Broom Dorycnium Horseshoe Vetch

False Senna a Horseshoe Vetch

#### Location

nr Monte Sacro Pulsano Monastery nr Monte Sacro Foresta Umbra, Bosco Quarto, Pulsano

nr Zapponeta, coastal sands Pulsano

Leaves only Pulsano Gorge Pulsano Gorge roadside nr Monte Sacro

Approach to Foresta Umbra

Foresta Umbra, Bosco Quarto Monte Sacro Open, stony areas Widespread in open, sunny areas Monte Sacro ? roadsides and sands near coast nr Monte Sacro widespread in open, sunny areas Pulsano Gorge Foresta Umbra

Mullein stop Cliffs at Peschici nr Fly-tip stop scattered in open sunny areas widespread in open sunny areas nr Monte Sant'Angelo Monte Sacro area Pulsano area Bosco di Spina Pulci scattered sites Monte Saraceno Pulsano monastery scattered sites, roadsides Widespread round Monte Sant'Angelo Pulsano Gorge Monte Sacro area roadside stop Peschici - cliff-top site Cyclamen stop - on steep bank open sunny areas - scattered Monte Saraceno

Lathyrus aphaca Lathyrus cicera Lathyrus clymenum Lathyrus hybridus Lathyrus ochrus Lathyrus setifolius Lathyrus vernus Lathyrus venetus Lotus corniculatus Lotus creticus Lotus cytisodes Lotus edulis Lotus halophilus Lupinus micranthus Medicago arabica Medicago littoralis Medicago orbicularis Medicago polymorpha Medicago rigidula Melilotus indicus Onobrychis alba Onobrychis aquidentata Onobrychis caput-galli Onobrychis crista-galli Pisum sativum Robinia pseudacacia Scorpiurus muricatus Securigera (Coronilla) varia Spartium junceum Tetragonolobus purpureus Trifolium angustifolium Trifolium campestre Trifolium dubium Trifolium hirtum Trifolium incarnatum Trifolium medium Trifolium pratense Trifolium repens Trifolium resupinatum Trifolium stellatum Trifolium subterraneum Trifolium tomentosum Vicia barbazitae Vicia benghalensis Vicia bithynica Vicia cracca Vicia hirsuta Vicia hybrida Vicia lutea Vicia melanops Vicia narbonensis Vicia peregrina Vicia sativa agg

#### Common name

Yellow Vetchling a red Vetchling

Hairy Yellow Vetch

Red Grass Vetchling Spring Pea

Bird's-foot Trefoil Southern Bird's-foot Trefoil a Trefoil Edible Lotus Sea Bird's-foot Trefoil Hairy Lupin Spotted Medick Sea Medick Large Disk Medick Toothed Medick -Small Mellilot

a Sainfoin a Sainfoin Cock's-comb Sainfoin

a Pea

False Acacia Scorpiurus Crown Vetch Spanish Broom Winged/Asparagus Pea Narrow-leaved Clover Hop Trefoil Lesser Trefoil Hairy Trefoil Crimson Clover Zigzag Clover **Red Clover** White Clover Reversed Clover Star Clover **Burrowing Clover** Woolly Trefoil a small vetch **Benghal Vetch Bithynian Vetch Tufted Vetch** Hairy Tare a Yellow Vetch Yellow Vetch Black Vetch Wandering Vetch (two-tone flowers) Common Vetch

#### Location

widespread in open sunny areas common in open, grassy areas roadsides near Peony stop Monte Sant'Angelo nr hotel Fly-tip stop roadside stop nr Peschici nr Monte Calvo roadsides roadsides, open areas coastal roadside stop Monte Sacro roadside coastal roadside stop Rocks at Peschici Bosco di Spina Pulci roadsides, field margins coastal sands nr Zapponeta nr Monte Saraceno nr Mullein stop Pilgrim's Path roadsides and lay-bys Near Monte Sant'Angelo Iris slopes nr Mullein stop Bosco di Spina Pulci nr Peony stop Roadsides, town gardens stony track nr Pulsano monastery Pulsano Gorge hillsides near coast at Peschici common in open, grassy areas roadsides common in stony areas grassy areas ? roadsides near coast Monte Sant'Angelo nr hotel field margins field margins roadside nr Bosco Quarto widespread in open sunny areas Iris slopes Monte Sant'Angelo nr hotel Bosco Quarto roadside stop Pilgrim's Path grassy areas, nr Peschici field margins ? grassy roadside areas and lay-bys Pilgrim's Path field margins Viola stop nr Bosco Quarto roadsides, field margins

### Vicia villosa

#### Fagaceae

Castanea sativa Fagus sylvatica Quercus cerris Quercus coccifera Quercus ilex Quercus pubescens

#### Fumariaceae

Corydalis solida Fumaria capreolata Fumaria muralis Fumaria officinalis

#### Gentianaceae

Blackstonia perfoliata

#### Geraniaceae

Erodium ciconium Erodium cicutarium Erodium malacoides Geranium columbinum Geranium dissectum Geranium lucidum Geranium molle Geranium purpureum Geranium robertianum Geranium rotundifolium Geranium sanguineum

#### Hypericaceae

Hypericum perforatum

#### Lamiaceae

Acinos alpinus Ajuga chamaepitys Ajuga genevensis Ajuga orientalis Clinopodium acinos Lamium bifidum Lamium garganicum Lamium maculatum Marrubium vulgare Marrubium alysson Origanum vulgare Prasium majus Prunella vulgaris Rosmarinus officinalis Salvia argentea Salvia fruticosa Salvia pratensis

#### Common name

#### Fodder Vetch

Beech Family Sweet Chestnut Beech Turkey Oak Spanish Oak Holm Oak Downy Oak

#### **Fumitory Family**

Bird-in-a-bush Tall Ramping Fumitory Common Ramping Fumitory Common Fumitory

### Gentian Family

Yellow-wort

#### Crane's-bill Family

a Stork's-bill Common Stork's-bill Mallow-leaved Stork's-bill Long-stalked Crane's-bill Cut-leaved Crane's-bill Shining Crane's-bill Dove's-foot Crane's-bill Little Robin Herb Robert Round-leaved Stork's-bill Bloody Crane's-bill

St. John's-wort Family Perforate St. John's-wort

#### **Deadnettle Family**

Alpine Basil Thyme Ground Pine Blue Bugle **Oriental Bugle** Basil-thyme **Bifid Dead-nettle** Large Red Dead-nettle Spotted Dead-nettle White Horehound a pink Horehound Oregano Prasium Selfheal Rosemary Silver Sage Three-leaved Sage Meadow Clary

#### Location

Fly-tip stop

Foresta Umbra Foresta Umbra Widespread Monte Sacro widespread Bosco di Spina Pulci

Bosco Quarto roadside stops widespread widespread

Olive groves nr Peschici

Field margins, stony slopes tracks and paths, widespread nr Mullein stop Mullein stop Monte Sant'Angelo Monte Sant'Angelo widespread Monte Sacro widespread Quarry stop

#### Mullein stop

Pilgrim's Path Pulsano Monastery Foresta Umbra 2 various orchid sites Pilgrim's Path Monte Sant'Angelo Pilgrim's Path Monte Saraceno Monte Saraceno sunny hillsides and stony slopes Monte Saraceno Cyclamen stop common on open hillsides, roadsides Leaves only Monte Sarceno Widespread

Salvia verbenaca Satureja hortensis Sideritis romana Sideritis syriaca Stachys cretica Stachys officinalis Thymus capitatus

#### Linaceae

Linum austriacum (narbonense) Linum bienne Linum catharticum Linum perenne Linum tenuifolium Linum trigynum

#### Malvaceae

Lavatera arborea Lavatera cretica Malva cretica Malva neglecta Malva sylvestris

**Moraceae** Ficus carica

#### Oleaceae

Fraxinus ornus Ligustrum vulgare Olea europaea

Orobanchaceae Orobanche alba Orobanche amethystea Orobanche caryophyllacea Orobanche minor Orobanche purpurea Orobanche rapum-genistae Orobanche sanguinea

**Oxalidaceae** Oxalis corniculata Oxalis pes-caprae

**Paeoniaceae** Paeonia mascula

Papaveraceae Chelidonium majus Papaver apulum Papaver hybridum Papaver rhoeas

#### Common name

Wild Clary Summer Savory Common Sideritis Syrian Sideritis Mediterranean Woundwort Betony A Thyme

#### **Flax Family**

Beautiful Flax Pale Flax Fairy (Purging) Flax Perennial Flax -

Mallow Family

Tree Mallow Cretan Mallow

Dwarf Mallow Common Mallow

Mulberry Family Fig

Olive Family Flowering Ash Privet Olive

### Broomrape Family Thyme Broomrape Amethyst Broomrape Clove-scented Broomrape Common Broomrape Yarrow Broomrape Greater Broomrape

Wood-sorrel Family Procumbent Yellow Sorrel Bermuda Buttercup

Paeony Family A Peony

Poppy Family Greater Celandine -Rough Poppy Common Poppy Location

Widespread nr Mattinata Pulsano Monastery sunny open areas (in bud) Monte Saraceno nr Bosco Quarto sunny open areas

nr Bosco Quarto Iris slopes widespread Pulsano area ? Monte Sacro

#### ?

coast nr Zapponeta roadside nr Mattinata coast nr Zapponeta widespread along roadsides

widely naturalised and cultivated

Widespread, hillsides, Bosco di Spina Pulci Pulsano Gorge Widespread and abundant

Monte Sant' Angelo Pulsano gorge Monte Saraceno dried flower spike only ? ? Monte Saraceno

Pulsano Monastery nr Peschici

copses and shady sites nr Bosco Quarto

Pulsano area nr Mullein stop roadsides and field margins field margins

Plantaginaceae Plantago arenaria Plantago coronopus Plantago lagopus Plantago lanceolata Plantago maritima Plantago seraria

**Polygalaceae** Polygala nicaeensis Polygala vulgaris

**Polygonaceae** Rumex obtusifolius Rumex pulcher Polygonum maritimum

**Primulaceae** Anagallis arvensis (Red & Blue forms) Cyclamen hederifolium Cyclamen repandum

Ranunculaceae Anemone apennina Anemone hortensis Clematis ficaria Delphinium peregrinum Eranthis hyemalis Ficaria verna agg. Nigella damascena Ranunculus acris Ranunculus arvensis Ranunculus bulbosus Ranunculus millefoliatus Ranunculus muricatus Ranunculus sceleratus Ranunculus velutinus

Resedaceae Reseda alba Reseda lutea Reseda luteola Reseda phyteuma

*Rhamnaceae* Palliurus spina-christi Rhamnus alaternus

**Rosaceae** Aremonia agrimonioides Crataegus monogyna Cydonia oblonga

#### Common name

Plantain Family Branched Plantain Buck's-horn Plantain Hare's-foot Plantain Ribwort Plantain Sea Plantain

Milkwort Family Nice Milkwort Common Milkwort

Knotweed Family Broad-leaved Dock Fiddle Dock Sea Knotgrass

Primrose Family Scarlet Pimpernel Ivy-leaved Sowbread Spring Cyclamen

Buttercup Family Blue Anemone

a Clematis a Larkspur Winter Aconite Lesser Celandine Love-in-a-mist Meadow Buttercup Corn Buttercup Bulbous Buttercup

Rough-fruited Buttercup Celery-leaved Buttercup

Mignonette Family White Mignonette Wild Mignonette Weld Corn Mignonette

Buckthorn Family Christ's Thorn Mediterranean Buckthorn

Rose Family Bastard Agrimony Hawthorn Quince Location

quarry stop widespread on paths, grassy areas coast nr Zapponeta roadsides on cliffs, Peschici Monte Saraceno

Iris slopes widespread in grassy areas

Cultivated areas Cyclamen site coastal roadside stop

Field margins, stony areas Leaves only, Foresta Umbra Woodland sites nr Bosco di Spina Pulci

Widepread in woodlands Open sites, widespread leaves and buds only leaves only Tulip fields - in seed. widespread in grassy areas leaves only widespread in grassy areas nr Monte Sant'Angelo field margins, nr tulip fields Pilgrim's Path nr Tulip fields ditches nr Zapponeta grassy areas nr Bosco Quarto

widespread in open, stony areas roadsides, verges Coast nr Zapponeta field margins

Mullein stop Pulsano Gorge

Bosco Quarto widespread roadside stop

Filipendula vulgaris Fragaria vesca Geum urbanum Malus sylvestris Potentilla hirta Prunus dulcis Prunus spinosa Pyracantha coccinia Pyrus amygdaliformis Pyrus communis Rosa sp. Rubus fruticosus agg Rubus sanctus Sanguisorba (Poterium) minor Sorbus aucuparia Sorbus torminalis

#### Rubiaceae

Asperula arvensis Asperula taurina Cruciata laevipes Galium aparine Galium mollugo Galium odoratum Galium setaceum Galium verum Rubia peregrina Sherardia arvensis Valantia hispida Valantia muralis

**Rutaceae** Ruta chalepensis

**Santalaceae** Osyris alba Thesium sp.

#### Saxifragaceae

Saxifraga bulbifera Saxifraga granulata Saxifraga tridactylites

Scrophulariaceae

Antirrhinum siculum Bellardia trixago Cymbalaria muralis Digitalis ferruginea Euphrasia agg. Linaria pelisseriana Misopates orontium Parentucella latifolia Parentucella viscosa

#### Common name

Dropwort Wild Strawberry Wood Avens Crab Apple Hairy Cinquefoil Almond Blackthorn Firethorn Almond-leaved Pear Pear A Rose Bramble Bramble Salad Burnet Rowan or Mountain Ash Wild Service Tree

#### **Bedstraw Family**

Blue Woodruff Southern Woodruff Crosswort Cleavers Hedge Bedstraw Woodruff

Lady's Bedstraw Wild Madder Field Madder Valantia a Valantia

#### Rue Family Fringed Rue

**Sandalwood Family** Osyris a Bastard Toadflax

Saxifrage Family Bulbous Saxifrage Meadow Saxifrage Rue-leaved Saxifrage

Figwort Family Sicilian Snapdragon Bellardia Ivy-leaved Toadflax Brown Foxglove Eyebright Jersey Toadflax Weasel Snout/Lesser Snapdragon Southern Red Bartsia Yellow Bartsia

#### Location

nr Mullein stop widespread Bosco Quarto Bosco di Spina Pulci Monte Sacro area widely cultivated roadsides planted - Monte Sant'Angelo widespread nr Monte Calvo Pulsano gorge widespread ? Pulsano area Monte Calvo area nr Monte Calvo

Tulip field and Peony stop ? Pilgrim's Path roadsides and field margins nr hotel, Monte Sant'Angelo Foresta Umbra Pulsano Monastery not in flower Monte Saraceno widespread Monte Saraceno Widespread in dry areas

#### leaves only, Pulsano Gorge

Monte Saraceno Pulsano area

Foresta Umbra widespread walls and rocks, widespread

Peschici - Trabucco stop Coastal site nr Zapponeta Walls, common, Monte Sant'Angelo leaves only ? ? roadside Olive grove stop widespread in open, stony areas Fly-tip stop

Scrophularia peregrina Scrophularia scopolii Verbascum longifolium Verbascum phoeniceum Verbascum thapsus Verbascum undulatum Veronica cymbalaria Veronica hederifolia agg Veronica serpyllifolia

**Solanaceae** Hyoscyamus alba Solanum sodomeum

**Thymelaeaceae** Daphne laureola Daphne sericea

**Tiliaceae** Tilia cordata

**Ulmaceae** Ulmus sp.

*Urticaceae* Parietaria judaica Urtica dioica Urtica pilulifera

Valerianaceae Centranthus ruber Valeriana tuberosa Valerianella sp.

Viola ceae Viola arvensis Viola graeca Viola odorata Viola riviniana

**Vitaceaea** Vitis vinifera

#### Common name

Italian (Nettle-leaved) Figwort a Figwort a Mullein Purple Mullein Aaron's Rod a Mullein Cymbalaria-leaved Speedwell Ivy-leaved Speedwell Thyme-leaved Speedwell

Nightshade Family White Henbane Apple of Sodom

Daphne Family Spurge Laurel

Lime Family Small-leaved Lime

Elm Family An Elm

Nettle Family Pellitory of the Wall Nettle Roman Nettle

Valerian Family Red Valerian

A Cornsalad

Violet Family Field Pansy A Pansy (purple or cream) Sweet Violet Common Dog Violet

Grape-vine Family Grape

#### Liliidae (Monocotyledons)

**Araceae** Arum italicum subsp. italicum Arum maculatum

**Cyperaceae** Carex caryophyllea Carex divulsa Arum Family Large Cuckoo Pint Cuckoo Pint

Sedge Family Spring Sedge Grey Sedge Location

nr Mullein stop leaves only, Monte Calvo area roadside nr Peschici nr Bosco di Spina Pulci widespread on roadsides nr Peschici leaves and tight buds only Bosco Quarto widespread in shaded areas grassy areas

walls of Pulsano Monastery cliff-top nr Peschici

Foresta Umbra roadside Cyclamen stop

roadside Cyclamen stop

Monte Sant'Angelo

Common, rocks and walls Cultivated areas Monte Saraceno

Widespread, roadsides Pulsano area stony areas, Pulsano Gorge

Iris slopes, Viola site Iris slopes, Bosco Quarto Foresta Umbra nr Bosco Quarto

widely cultivated

Monte Saraceno, Monte Sacro Foresta Umbra

Quarry stop Quarry stop

Carex sylvatica

Dioscoreaceae Tamus communis

#### Iridaceae

Crocus sp. Gladiolus italicus Moraea (Gynandriris) sisyrinchium Hermodactylus tuberosus Iris foetidissima Iris lutescens\* Iris pseudopumilla\*

#### Juncacaeae

Luzula campestris Luzula forsteri

#### Liliaceae

Allium neapolitanum Allium pendulinum Allium roseum Allium subhirsutum Allium subvillosum Allium triquetum Allium ursinum Asparagus acutifolius Asphodeline lutea Asphodelus aestivus Asphodelus fistulosus Bellevalia dubia Muscari comosum Muscari neglecta Narcissus poeticus Ornithogalum angustifolium Ornithogalum montanum Ornithogalum pyrenaicum Polygonatum multiflorum Ruscus aculeatus Smilax aspera Tulipa sylvestris Urginea maritima

#### Orchidaceae

Anacamptis coriophora (Orchis fragrans) Anacamptis (Orchis) papilionacea Anacamptis (Orchis) morio Anacamptis (Orchis) morio subsp. picta Anacamptis pyramidalis Cephalanthera longifolia Dactylorhiza fuchsii Dactylorhiza romana Dactylorhiza sambucina

#### Common name

Wood Sedge

Black Bryony Family Black Bryony

Iris Family a Crocus Field Gladiolus Barbary Nut Widow or Snake's-head Iris Stinking Iris

Rush Family Field Wood-rush Southern Wood-rush

Lily Family Naples Garlic Pendulous Garlic Rose Garlic Hairy Garlic

Three-cornered Leek Ramsons Spiny Asparagus Yellow Asphodel Common Asphodel Hollow-leaved Asphodel Bellevalia **Tassel Hyacinth** Dark Grape Hyacinth Pheasant's-eye Daffodil Common Star of Bethlehem Star of Bethlehem **Bath Asparagus** Solomon's Seal Butcher's Broom Common Smilax Wild Tulip Sea Squill

#### **Orchid Family**

A Bug Orchid Pink Butterfly Orchid Green-winged Orchid a Green-winged Orchid Pyramidal Orchid Sword-leaved Helleborine Common Spotted-orchid Roman Orchid Elderflower Orchid

#### Location

Foresta Umbra

roadsides stops, shaded areas

leaves only, iris slopes leaves only, but one in flower nr Bosco Quarto Roadside near coast widespread, most over, but in flower nr Pulsano Foresta Umbra, Cyclamen stop hillsides in Bosco Quarto area Bosco Quarto

Bosco Quarto Bosco di Spina Pulci

Pulsano Gorge Bosco Quarto Mullein stop widespread Pulsano Gorge nr Peschici Foresta Umbra widespread, esp Bosco di Spina Pulci locally common widespread Pulsano scattered sites on sandy ground widespread abundant in some stony areas Bosco Quarto widespread Iris slopes Mullein stop, buds only Foresta Umbra widespread, Bosco Quarto, Foresta Umbra Pulsano Gorge abundant in fields below Monte Sant'Angelo leaves only - widespread.

Monte Saraceno (week 2) widespread, open sunny sites widespread one site , Foresta Umbra Mullein stop Leaves only, nr summit of Monte Sacro Mostly in bud, but a few in flower nr Monte Calvo Bosco Quarto and other sites, common scarce, below Monte Calvo

Himantoglossum hircinum Himantoglossum robertianum Neottia nidus-avis Neotinea (Orchis) lactea Neotinea maculata Neotinea (Orchis) ustulata Ophrys apifera Ophrys apulica\* Ophrys bertoloniformis\* Ophrys bertolonii Ophrys biscutella (argolica) Ophrys bombyliflora Ophrys fuciflora Ophrys iricolor Ophrys melena / numida Ophrys passionis var. garganica\* Ophrys lutea Ophrys promontorii\* Ophrys sicula Ophrys sipontensis\* **Ophrys** sphegodes O. sphegodes ssp atrata (O. incubacea) Ophrys tenthredinifera Orchis anthropophora Orchis italica Orchis pauciflora Orchis provincialis Orchis purpurea Orchis quadripunctata Serapias cordigera Serapias lingua Serapias parviflora Serapias vomeracea

#### Hybrids (a selection)

Dactylorhiza sambucina x D. romana Ophrys incubacea x Ophrys garganica Ophrys incubacea x Ophrys bertolonii Orchis x bivonae (O.anthropophora x italica) Anacamptis morio x A. papilionacea Orchis purpurea x O. italica

#### Poaceae

Aegilops geniculata Anisantha diandra Anisantha sterilis Arundo donax Anthoxanthum odoratum Avena barbata Avena sterilis Avena sp. Briza maxima Briza media

#### Common name

Lizard Orchid Giant Orchid Bird's Nest Orchid Milky Orchid Dense-flowered Orchid Burnt Tip Orchid Bee Orchid Apulian Ophrys -Bertoloni's Bee Orchid Spectacled Ophrys Bumblebee Ophrys

a Yellow Ophrys Gargano Ophrys a Yellow Ophrys

Late Spider Orchid

-Early Spider Orchid Dark Ophrys Sawfly Ophrys Man Orchid Naked Man Orchid Sparse Flowered Orchid Provence Orchid Lady Orchid Four-spotted Orchid Heart-flowered Tongue Orchid Tongue Orchid Small-flowered Tongue Orchid Plough-share Tongue Orchid

**Grass Family** 

Great Brome

Barren Brome

Sweet Vernal Grass

Large Quaking Grass

**Quaking Grass** 

Giant Reed

Bristle Oat

Barren Oat

an Oat

Aegilops

#### Location

leaf rosettes and tight buds only. going over, a few plants near Bosco Quarto Old flower spikes, Bosco Quarto Pulsano area several sites, incl Monte Sant'Angelo nr Foresta Umbra Going over, a few plants near Mullein stop Pulsano Gorge, Fly-tip stop nr Monte Sacro and other sites nr Monte Sacro and other sites Bosco Quarto and other sites Pulsano Gorge Pulsano area Monte Sant'Angelo ?? **MonteSaraceno** Pulsano area and several other sites scattered sites, open stony areas Pulsano areas common and widespread scarce, Pulsano area and Monte Sacro widespread, seen at most orchid stops roadside stop nr Foresta Umbra Pulsano area, Monte Sacro and other sites widespread, seen at most orchid stops widespread, seen at most orchid stops Monte Sacro Quarry stop nr Peschici in olive grove Monte Sacro Bosco di Spina Pulci Widespread, sunny areas scarce, few plants in one olive grove, Fly-tip stop Fly-tip stop

### nr Monte Calvo

possible - nr Monte Sant'Angelo ? Monte Sant'Angelo, Monte Sacro Pulsano area Pulsano area

Pulsano and other sites fields and roadsides scattered sites wetlands nr coast Bosco Quarto Fields and grassy areas Fields and grassy areas ? Mullein stop Quarry stop

Scientific name	Common name	Location
Brachypodium (sylvaticum)	False Brome	Bosco Quarto
Bromus hordeaceus	Soft-brome	Peschici cliff-top
Catapodium rigidum	Fern Grass	rocks nr Quarry stop
Dactylis glomerata	Cock's-foot	Mullein Stop
Festuca vivipera	Viviparous Fescue	Peschici
Hordeum murinum	Wall Barley	nr coast
Hordeum sp.	a Barley	widespread
Lagurus ovatus	Hare's-foot Grass	Fly-tip stop
Melica uniflora	Wood Melick	Foresta Umbra
Phragmites australis	Common Reed	nr coastal salt pans
Rostraria cristata	Mediterranean Hair-grass	Peschici
Stipa pennata	a Feather Grass	hillsides nr Peschici
Lichens		
Lobaria pulmonaria	Tree Lungwort	Bosco Quarato, Foresta Umbra
Fungi		
Morchellus esculentus	Morel	Bosco Quarto
Coprinus (lagopus)	Ink Cap sp	
Coprinus commutatus	Shaggy Ink Cap	
Stereum hirsutum	a bracket fungus	Foresta Umbra
Clathrus ruber		Quarry stop
Bolbitius sp	Egg yolk fungus	
Fomes spp	Bracket fungi	Foresta Umbra
Geastrum	Earth Star	

**Birds** Thanks to Dave White ( $\checkmark$  = recorded but not counted; H = heard only)

			April								
	Common name	Scientific name	21	22	23	24	25	26	27	28	
3	Mallard	Anas platyrhyncos	✓					✓			
6	Great Cormorant	Phalacrocorax carbo	✓								
10	Little Egret	Egretta garzetta	✓								
14	Greater Flamingo	Phoenicopterus roseus	✓								
17	Western Marsh Harrier	Circus aeruginosus	✓		<ul> <li>✓</li> </ul>						
18	Montagu's Harrier	Circus pygargus		<ul> <li>✓</li> </ul>							
19	Common Buzzard	Buteo buteo	✓	<ul> <li>✓</li> </ul>			✓	✓	✓	✓	
21	Eurasian Sparrowhawk	Accipiter nisus				✓		✓			
22	Northern Goshawk	Accipiter gentilis							✓		
23	Common Kestrel	Falco tinnunculus	✓	<ul> <li>✓</li> </ul>	✓	✓	✓	✓	✓	✓	
24	Lesser Kestrel	Falco naumanni	20+								
34	Kentish Plover	Chasradrius alexandrinus	✓								
41	Common Sandpiper	Actitis hypoleucos							✓	✓	
44	Common Greenshank	Tringa nebularia	✓								
47	Black-headed Gull	Chroicocephalus ridibundus	✓								
48	Slender-billed Gull	Chroicocephalus genei	✓								
49	Mediterranean Gull	Larus melanocephalus	✓								
50	Yellow-legged Gull	Larus michahellis	✓			✓	✓	✓	✓		
51	Lesser Black-backed Gull	Larus fuscus	✓						✓		
53	Sandwich Tern	Sterna sandvicensis	?								
55	Rock Dove /Feral Pigeon	Columba livia domestica	✓	✓	✓	✓	✓	✓	✓	✓	
56	Rock Dove	Columba livia						✓			
57	Common Wood Pigeon	Columba palumbus			✓	✓	✓	✓			

							pril			
	Common name	Scientific name	21	22	23	24	25	26	27	28
58	Eurasian Collared Dove	Streptopelia decaocto	✓	✓	✓	✓	✓	✓	✓	✓
59	European Turtle Dove	Streptopelia turtur						✓		
60	Common Cuckoo	Cuculus canorus		Н		Н	Н	Н		
64	Common Swift	Apus apus	✓	✓	✓	✓	✓	✓	✓	✓
66	Alpine Swift	Apus melba						✓	120+	✓
67	Eurasian Hoopoe	Upupa epops					✓		✓	
68	European Bee-eater	Merops apiaster	✓	✓						
69	European Green Woodpecker	Picus viridis				Н			Н	
70	Great Spotted Woodpecker	Dendrocopos major			✓					
75	Crested Lark	Galerida cristata	✓							
79	Barn Swallow	Hirundo rustica	✓	✓	✓	✓	✓	✓	✓	✓
81	Common House Martin	Delichon urbica							✓	✓
84	White Wagtail	Motacilla alba	<ul> <li>✓</li> </ul>			✓		✓	✓	
86	Yellow (Blue-headed) Wagtail	Motacilla flava flava	<ul> <li>✓</li> </ul>							
89	European Robin	Erithacus rubecula	_	<ul> <li>✓</li> </ul>				✓	✓	-
90	Common Nightingale	Luscinia megarhynchos		Н	н	н	Н		Н	
93	Black-eared Wheatear	Oenanthe hispanica		···		··· ✓	···			
95	Common Stonechat	Saxicola torguata		<ul> <li>✓</li> </ul>		✓	<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>		
96	Song Thrush	Turdus philomelos		•	н		•	H		
98	Common Blackbird	Turdus prinomeios	<b>√</b>	<ul> <li>✓</li> </ul>	 ✓	<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>	✓ II	✓	<ul> <li>✓</li> </ul>
90	Blue Rock Thrush	Monticola solitarius		•	•	•	•	•		-
					<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>	✓	3 ✓	
100	Blackcap	Sylvia atricapilla	H	Н	•	▼ ✓	v	v	▼ ✓	H
101	Common Whitethroat	Sylvia communis	_			✓ ✓			•	
102	Lesser Whitethroat	Sylvia curruca		<ul> <li>✓</li> <li></li> </ul>		~				
103	Sardinian Warbler	Sylvia melanocephala		H					✓	
105	Subalpine Warbler	Sylvia cantillans		✓	✓	✓	✓			<u> </u>
107	Zitting Cisticola	Cisticola juncidis							Н	<u> </u>
113	Wood Warbler	Phylloscopus sibilatrix						Н		
114	Western Bonelli's Warbler	Phylloscopus bonelli						Н		
115	Common Chiffchaff	Phylloscopus collybita			Н		Н			
116	Firecrest	Regulus ignicapilla			✓					
117	Winter Wren	Troglodytes troglodytes			✓	✓	✓		✓	
120	Great Tit	Parus major		✓	✓	✓	✓	✓	✓	
121	European Blue Tit	Cyanistes caeruleus		✓	✓	✓	✓	✓	✓	
124	Eurasian Nuthatch	Sitta europaea			✓			✓		
125	Eurasian Treecreeper	Certhia familiaris			✓			✓		
126	Short-toed Treecreeper	Certhia brachydactyla			✓					
128	Common Magpie	Pica pica	✓	✓	✓	✓	✓	✓	✓	✓
129	Eurasian Jay	Garrulus glandarius	✓		✓		✓	✓		
130	Western Jackdaw	Corvus monedula	✓	✓	✓	✓	✓	✓	✓	✓
131	Hooded Crow	Corvus cornix	<ul> <li>✓</li> </ul>	✓	✓	✓	<ul> <li>✓</li> </ul>	✓	✓	<ul> <li>✓</li> </ul>
132	Common Raven	Corvus corax		✓						
133	Common Starling	Sturnus vulgaris	_		<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>		✓	✓	-
135	House Sparrow	Passer domestica	✓							
136	Italian Sparrow	Passer italiae		<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>	✓	
137	Spanish Sparrow	Passer hispaniolensis	✓					<ul> <li>✓</li> </ul>		-
138	Eurasian Tree Sparrow	Passer montanus						· ✓		
140	Common Chaffinch	Fringilla coelebs		Н	<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>	· ✓	✓	<ul> <li>✓</li> </ul>
140	Common Linnet	Carduelis cannabina			✓ ✓			-	✓ ✓	۲.
			_		▼ ✓	<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>	-	
142	European Goldfinch European Greenfinch	Carduelis carduelis Chloris chloris		H	▼ ✓	×	<b>–</b>	•		

			April							
	Common name	Scientific name	21	22	23	24	25	26	27	28
144	European Serin	Serinus serinus	✓	<ul> <li>✓</li> </ul>				✓	✓	
146	Cirl Bunting	Emberiza cirlus		<ul> <li>✓</li> </ul>	✓	✓	✓			
147	Corn Bunting	Miliaria calandra	~	$\checkmark$	~	~				

Mammals (S = scat)

1	Red Fox	Vulpes vulpes				✓	✓	
2	Wolf	Canis lupus			S			
3	Bank Vole	Clethrionomys glareolus		✓				

Reptiles & Amphibians

1	Agile Frog	Rana dalmatina		✓				
2	Green Lizard	Lacerta viridis			✓			
3	Common Wall Lizard	Podarcis muralis	✓					
4	Italian Wall Lizard	Podarcis sicula	✓			✓	✓	
5	Four-lined Snake	Elaphe quatuorlineata	✓					
6	Aspic Viper	Viperus aspis						

**Butterflies** 

1	Mallow Skipper	Carcharodus alceae		✓					
2	Grizzled Skipper	Pyrgus malvae				✓		✓	
3	Southern Festoon	Zerynthia polyxena				3	✓	✓	
4	Scarce Swallowtail	Iphicides podalirius		<ul> <li>✓</li> </ul>		✓	✓	$\checkmark$	
5	Swallowtail	Papilio machaon		<ul> <li>✓</li> </ul>	✓	✓	✓	$\checkmark$	
6	Wood White	Leptidea sinapis						✓	
7	Large White	Pieris brassicae	✓	<ul> <li>✓</li> </ul>		✓	✓	$\checkmark$	
8	Small White	Pieris rapae		<ul> <li>✓</li> </ul>		✓		$\checkmark$	
9	Green-veined White	Pieris napi				✓		✓	
10	Orange Tip	Anthocharis cardamines		✓		✓	✓	$\checkmark$	
11	Eastern Dappled White	Euchloe ausonia		✓	✓	✓		✓	
12	Berger's Clouded Yellow	Colias alfacariensis		✓					
13	Clouded Yellow	Colias crocea	✓	✓					
14	Cleopatra	Gonepteryx cleopatra		✓				$\checkmark$	
15	Brimstone	Gonepteryx rhamni		✓		✓	✓	✓	
16	Green Hairstreak	Callophrys rubi		✓		✓		✓	
17	Small Copper	Lycaena phlaeas					✓	$\checkmark$	
18	Little Blue	Cupido minimus		✓		✓		✓	
19	Green-underside Blue	Glaucopsyche alexis		✓					
20	Common Blue	Polyommatus icarus	✓	✓	✓		✓	$\checkmark$	
21	Adonis Blue	Lysandra bellargus		✓	✓			✓	
22	Brown Argus	Aricia agestis		✓		✓		✓	
23	Large Tortoiseshell	Nymphalis polychloros							
24	Small Tortoiseshell	Aglais urticae		✓					
25	Red Admiral	Vanessa atalanta		✓			✓	✓	
26	Painted Lady	Vanessa cardui		✓	✓	✓		✓	
27	Glanville Fritillary	Melitaea cinxia				✓			
28	Spotted Fritillary	Melitaea didyma						✓	
29	Speckled Wood	Parage aegeria		<ul> <li>✓</li> </ul>		✓		✓	
30	Wall Brown	Lasiommata megera		<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>	✓		✓	
31	Small Heath	Coenonympha pamphilus		✓	<ul> <li>✓</li> </ul>		<ul> <li>Image: A start of the start of</li></ul>	✓	

					A	oril			
Common name	Scientific name	21	22	23	24	25	26	27	28

### Moths (C= caterpillar)

1	Nine-spotted	Amata phegea				✓	
2	5-Spot Burnet	Zygaena trifolii				√?	
3	6-Spot Burnet	Zygaena filipendulae				✓	
4	Hummingbird Hawk Moth	Macroglossum stellatum				✓	
5	Forester Moth	Adscita statices	✓				
6	Cream-spot Tiger	Epicallia villica				✓	
7	Silver Y	Autographa gamma	✓			✓	
8	A Lackey moth sp	Malacosoma franconica	C			С	
9	An Eggar	Eriogaster rimicola			С		

# Other Invertebrates

1	Egyptian Grasshopper	Anacridium aegyptium	✓			✓	
2	an Ascalaphid	Libelloides coccajus				✓	
3	Bee Fly	Bombylius major	✓	✓		✓	
4	Hornet	Vespa sp				✓	
5	Solitary Wasp sp					✓	
6	Carpenter Bee	Xylocopa violacea				✓	
7	Rose Chafer	Cetonia aurata.			✓		
8	A red-striped Shield Bug	Graphosoma lineata (italica)	✓		✓	✓	
9	a Dung Beetle	Scarabaeus sp	✓				
10	Knotgrass Leaf Beetle	Chrysolina polita					
11	Praying Mantis	Empusa pennata	✓				
12	Roesell's Bush Cricket	Metriooptera roesellii				✓	
13	Hairy Hawker Dragonfly	Brachytron pratense				✓	
14	Green-eyed Hawker	Aeshna isosceles				$\checkmark$	
15	Lesser Emperor Dragonfly	Aeshna parthenope				✓	
16	European Wolf Spider	Lycosa tarantula				✓	
17	a Jumping Spider (red & black)	Philaeus chrysops	✓			✓	
18	Millipede	cf Schizophyllum sabulosum	✓				

Seashore Molluscs:

1	Pelican's-foot Shell	Aporrhais pes-pelecanis				
2	Necklace Shell	Natica sp				
3	Common Cerith	Cerithium vulgatum				

### Land Molluscs

1	Roman Snail	Helix pomatia		✓		✓	
2	Trapdoor Snail	Pomatia elegans		$\checkmark$		✓	