

## **Report on Iter Mediterraneum III**

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### **Introduction**

As planned by the OPTIMA Commission for the Itinera Mediterranea, the third Iter Mediterraneum took place in Sicily from the 29<sup>th</sup> of May to the 18<sup>th</sup> of June 1990.

It was organized by F. M. Raimondo (Palermo), who selected a wide area of the coast, covering part of the provinces of Palermo, Trapani, Caltanissetta, Ragusa, Siracusa, Catania and Messina, and of the mountain systems (Sicani, Madonie, Nebrodi, Erei, Etna and Peloritani). Special excursions were realized, partly during the programmed free days, by some of the local participants to collect plant material in areas not originally included in the programme. These are the neighborhoods of Mazara del Vallo (Trapani), Sciacca (Agrigento) and Gela (Caltanissetta), on the coast; of Santa Caterina Villarmosa (Caltanissetta) and Montallegro and Aragona (Agrigento), in the inland; Levanzo and Marettimo, in the Egadi Islands opposite Trapani. The basic and complementary itinerary is shown in Fig.1.

The collections, besides vascular plants, included briophytes, fungi and lichens.

A preliminary seminar was held in Palermo on May 29<sup>th</sup> in the morning. Four lectures, respectively by V. Agnesi, R. Catalano, G. Venturella and F. M. Raimondo, had been planned. The first two, concerning the physical-geographic features of the Sicilian territory, even if not delivered for intervening unavailability of the lecturers, have been included in this volume together with the other two.

This Iter was supported by OPTIMA, the Zingaro Nature Reserve management, the Offices of the Madonie, Nebrodi and Etna Parks. Logistic support was provided by the Forest Body Management of Sicily Region through local offices.

### **Local organizer:**

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### **Senior participants:**

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Ruprecht and Irene D ll, Mercator Universit t Duisburg, Germany.

Salvatore Brullo, Dipartimento di Botanica, Universit  di Catania, Italy.

### **Junior participants:**

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Massimo Mastracci, Dipartimento di Scienze Ambientali, Universit  dell'Aquila, Italy.

Dmitar Lakusic, Institut za Botaniku i Botanica basta "Jevremovac", Bioloski fakultet, Univerzitetu u Beogradu, Yugoslavia.

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### **Itineraries**

In the afternoon the collections started off following the scheduled itinerary with two stops at the close Monte Pellegrino and along the Addaura littoral. Some members of the local staff made a trip to Monte Gallo to collect some very localized endemics (*Anthemis ismelia*, *Hieracium lucidum*, *Scabiosa limonifolia* e *Genista gasparrini*). Some others made instead aimed collections along the Oreto River, between the Villagrazia Bridge and Monreale.

In the direction of the village of Scopello (Trapani) – where overnight stay had been planned – some participants stopped at Capo Rama and Balestrate along the Terrasini littoral to collect peculiar plants (*Ephedra distachya*, *E. fragilis* e *Juniperus phoenicea*).

On May 30<sup>th</sup> a comprehensive trip took place to the recently established Zingaro Nature Reserve led by the director Mr. Angelo Villani who kindly invited the whole group to lunch in the Reserve premises. In the morning collections were made between Scopello and Monte Passo del Lupo and, after lunch, along the coast, from Tonnarella dell'Uzzo to San Vito lo Capo, where the group stayed overnight.

On May 31<sup>st</sup> further collections were made along the route San Vito lo Capo, Macari, Cornino, Monte Cofano, Bonagia, Erice and ended at Palazzo Adriano, a typical centre of

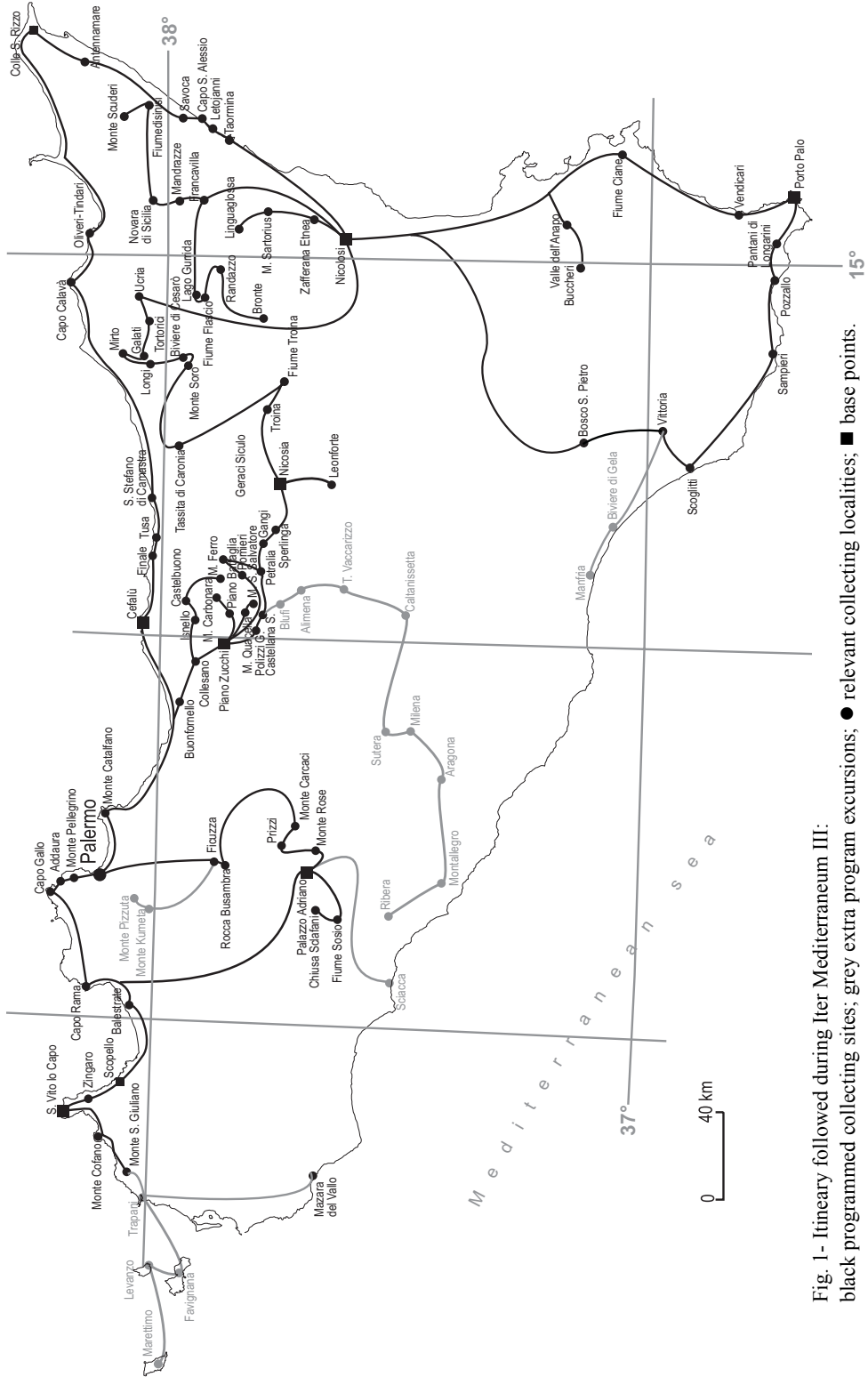


Fig. 1 - Itineary followed during Iter Mediterraneum III:

black programmed collecting sites; grey extra program excursions; ● relevant collecting localities; ■ base points.

the western Sicani Mountains. There were interesting findings of *Erica sicula*, *Asperula rupestris* and *Hieracium cophanense*. Some members of the local staff reached the near Egadi Islands and then the Trapani saline as well as the Mazara del Vallo neighbourhood to make collections aimed at documenting some floristic peculiarities of far western Sicily (*Bupleurum dianthifolium*, *Helichrysum rupestre* var. *messeri*, *Brassica macrocarpa*, *Scilla hughii*, *Periploca angustifolia*, *Ophioglossum lusitanicum*, *Quercus calliprinos* e *Anemone palmata*). Staying at Palazzo Adriano made it easier to survey the most significant part of the Sicani Mountains and the Sosio River basin on June 1<sup>st</sup> and 2<sup>nd</sup>.

On June 1<sup>st</sup> collections were made at Monte Rose and in Sant'Adriano e Carcaci wood where the findings of *Aristolochia clusii* and *Salvia argentea* are noteworthy. On June 2<sup>nd</sup>, after a collection in the Sosio River basin, the group went to Ficuzza and Rocca Busambra gathering some interesting plant along the road (*Vicia sicula* and *Teucrium spinosum*). Single members of the staff reached the Carboj River basin, near Sciacca town, and the Pizzuta and Kumeta Mounts to collect outstanding findings such as *Brassica rupestris*, *Euphorbia bivonae* and *Centaurea* gr. *cineraria* (later recognized as a new species: *C. saccensis*), *Viola ucriana*, (then identifiable as *V. nebrodensis* var. *lutea*), *Helleborus bocconeii* subsp. *intermedius*, *Brassica rupestris* subsp. *hispida* and *Scilla sicula*. In the Ficuzza-Rocca Busambra area collections of *Viola tineorum* (then identifiable as *V. nebrodensis* var. *grandiflora*), *Armeria gussoni*, *Anthyllis vulneraria* subsp. *busambarensis* are worthy remembering.

In the evening the group went on the Madonie Mountains. On the way a brief stop was made at Buonfornello in order to collect exotic species such as *Gomphocarpus fruticosus*, *Pennisetum setaceum* e *Ricinus communis*. On the Madonie, the small forest barracks of Piano Zucchi, provided by the Regional Administration (Fig. 2) were used as laboratory of the Iter.

In the morning of the second day (3<sup>th</sup> June), the group made a trip to the Quacella siera and San Salvatore Mount. The collections were really copious. *Helichrysum nebrodense*, *Draba olympicoides*, *Armeria nebrodensis*, *Edraianthus graminifolius* subsp. *siculus*, *Onosma canescens*, *Jurinea humilis* subsp. *bocconii* (Fig. 3), *Allium nebrodense* and *Plantago humilis* are noteworthy remembering.

Even if planned as a day of rest, the following morning collections were made in the Collesano, Isnello and Castelbuono areas, from where the group reached Piano Pomo to see the monumental population of *Ilex aquifolium*. These collections also recorded the occurrence of critical taxa such as the genera *Genista* (also studied after the iter and identified as *Genista madoniensis* e *G. demarcoi*) and *Dianthus* (here described and named *D. minae*).

The whole 5<sup>th</sup> of June was spent in a difficult excursion on the Carbonara massif (1979 m above s. l.) and its western (Colma grande) and southern slopes (Piano Battaglia). The collection was copious and rich in either rare or endemic taxa such as: *Viola nebrodensis*, *Viola parvula* var. *perpusilla*, *Prunus mahaleb* var. *cupaniana*, *Holosteum umbellatum*, *Peucedanum nebrodense*, *Vicia glauca*, *Androsace elongata* subsp. *breistrofferi*, *Sedum acre*, *Saxifraga adscendens* e *Aubrietia deltoidea* var. *sicula*. At Piano Battaglia: *Elaeocharis nebrodensis*, *Ranunculus lateriflorus*, *Myurus minimus* and *Barbarea sicula* were also collected as well as fungi specimens including *Pleurotus nebrodensis*.

Following the scheduled route, on June 6<sup>th</sup> collections were made on both carbonaceous and siliceous soils at altitudes ranging between 1600 and 1850 m above s. l.; different environments and habitats, often including humid areas of remarkable importance, were also visited where interesting collections of cryptogams, mainly bryophytes, were made.



Fig. 1. Some participants busy with the presses to dry the plant material collected at Ficuzza-Busambra the previous day.

Collections were also carried out in the following localities: Faguarè, near Piano Battaglia, then at Canna, Passo delle Botte, Rocca di Mele, Pomieri, Portella Mandarini, Bozzolino, Scorzone, Catarineci, Geraci, Pollicino as well as in the neighbourhood of the Petralie and Castellana Sicula villages.

Different species belonging to the genera *Carex* and *Hieracium*, such as *Adenostyles glabra* subsp. *nebrodensis*, *Armeria nebrodensis*, *Cirsium echinatum*, *Ophioglossum vulgatum*, *Hypericum androsaemum*, *Osmunda regalis*, *Aster sorrentini* and *Allium castellanense* were also collected.

*Hieracium* infertile material from Botte Pass will be at the basis of further collections and relevant studies will lead to the description of *Hieracium pignattianum* included in this volume.

On June 7<sup>th</sup> the group reached the amphitheatre of Quacella, a dolomite environment rich in endemics, pushing as far as the above Vallone Madonna degli Angeli and, on the way back, Pietà and Polizzi Generosa. *Abies nebrodensis*, *Helichrysum nebrodense*, *Senecio candidus*, *Iberis pruitii*, *Stipa sicula*, *Iris pseudopumila*, *Onosma canescens*, *Saponaria sicula*, *Laserpitium siculum* and *Dianthus gasparrini* are worthy mentioning among such collections.

On June 8<sup>th</sup>, in the morning, the group left the Madonie making for Nicosia, the base place on the Erei Mountains. On the way, significant localities near Gangi (Monte San Calogero and Monte Zimmarà), Sperlinga and Leonforte were visited. Some members of the local staff followed a different route - in the evening rejoining the group at the new base place - to collect near Alimena, Blufi, Torrente Vaccarizzo (Palermo), Terrapilata, Sutera,



Fig. 2. *Jurinea humilis* subsp. *bocconii* (the plant inspired the cover logo of Bocconea) with *Hieracium macranthum* and *Helianthemum canum* in the carbonate habitat of the Madonie Mountains.

Milena (Caltanissetta), Montallegro, Ribera, Aragona (Agrigento). Among the collections, *Capnophyllum peregrinum*, *Limonium catanzaroi*, *L. optima*, *Brassica villosa* subsp. *tinei*, *Tolpis altissima*, *Scabiosa dichotoma*, *Ammi crinitum*, *Parapholis pycnantha* and *Solanum eleagnifolium* are worthy remembering. Instead, the collections made within the scheduled itinerary include *Tanacetum balsamita*, *Celtis tournefortii*, *Stipa sicula* and *Echinophora tenuifolia*.

On June 9<sup>th</sup>, left Nicosia, the group went to Nicolosi, a strategic point to survey the southern and eastern slopes of the Nebrodi Mountains and the whole Etna area.

On the route, collections were made near Troina and in some localities of the Nebrodi Mountains (Tassita, Maulazzo, Monte Soro, Portella Scafi).

Among the collections, important findings are: *Taxus baccata*, *Fraxinus excelsior*, *Polygonatum multiflorum*, *Cirsium vallis-demonis*, and *Carex paniculata* new to the Sicilian flora. In the Tassita area were gathered findings of *Pyrus vallis-demonis*, then were lacking in fruits, which is described in this volume on the basis of better characterized specimens, collected after the Iter.

On June 10<sup>th</sup>, the group investigated and made collections in the areas around Biviere di Cesarò (Fig. 4), Portella Scafi, Mangalaviti and Portella Gazzana, then making for Longi, Mirto, Galati Mamertino, Tortorici and Ucria, passed through mainly siliceous soils partially covered with woods and grasslands with trees, with widespread and sometimes wide humid areas. Among the findings recorded for this day, the following are worthy mentioning: *Polygonum amphibium*, *Carex paniculata* and *Centaurea jacea*, *Epilobium*



Fig. 3. The endemic *Betula aetnensis* on the Sartorius Mountains (Etna).



Fig. 4. The lake named "Biviere di Cesarò" (Nebrodi Mountains): some participants during the pic-nic.

Table 1. Collecting localities and related geographic data.

Locality	Altitude (m a.s.l.)	Date	Latitude N	Longitude E
Palermo: Foro Italico	0-20	29/05/1990	38° 06'	13° 22'
Palermo: Monte Pellegrino, slopes	100-200	29/05/1990	38° 08'	13° 21'
Palermo: Monte Pellegrino	300-400	29/05/1990	38° 10'	13° 21'
Palermo: Monte Pellegrino, Gurgu Santa Rosalia	200-300	29/05/1990	38° 10'	13° 21'
Palermo: Addaura	0-50	29/05/1990	38° 11'	13° 20'
Palermo: Monte Gallo, slopes	100-200	29/05/1990	38° 13'	13° 19'
Palermo: Fiume Oreto	0-10	29/05/1990	38° 06'	13° 22'
Palermo: Fiumelato di Meccini	350-400	29/05/1990	38° 04'	13° 18'
Capo Rama: natural reserve	0-50	29/05/1990	38° 08'	13° 03'
Balestrate: seaside	0-10	29/05/1990	38° 02'	12° 59'
Scopello: neighborhoods	0-50	30/05/1990	38° 04'	12° 48'
Zingaro: Galleria di Scopello	100	30/05/1990	38° 07'	12° 45'
Zingaro: near Monte Sparagio	100-200	30/05/1990	38° 04'	12° 46'
Zingaro: Portella S. Giovanni	750-850	30/05/1990	38° 07'	12° 45'
Zingaro: Monte Passo del Lupo	550-650	30/05/1990	38° 07'	12° 45'
Zingaro: Pianetti	450-550	30/05/1990	38° 08'	12° 45'
Zingaro: Tonnarella dell'Uzzo	0-50	30/05/1990	38° 06'	12° 47'
San Vito Lo Capo: Isulidda	10-30	31/05/1990	38° 10'	12° 44'
Monte Cofano: seaside	0-10	31/05/1990	38° 06'	12° 40'
Monte Cofano: slopes	150-250	31/05/1990	38° 06'	12° 39'
Trapani: Bonagia	0-50	31/05/1990	38° 03'	12° 36'
Monte San Giuliano: slopes	350-450	31/05/1990	38° 02'	12° 35'
Monte San Giuliano: Bivio di Erice	600	31/05/1990	38° 02'	12° 34'
Monte San Giuliano: Erice	700	31/05/1990	38° 02'	12° 35'
Egadi: Favignana	0-100	31/05/1990	37° 55'	12° 19'
Egadi: Levanzo	0-100	31/05/1990	38° 00'	12° 20'
Egadi: Marettimo	0-100	31/05/1990	37° 58'	12° 03'
Trapani: Saline	0-10	31/05/1990	38° 00'	12° 30'
Mazara del Vallo: neighborhoods	10-50	31/05/1990	37° 38'	12° 38'
Sicani: Monte Rose	1000-1200	01/06/1990	37° 39'	13° 25'
Sicani: Bosco S. Adriano	900-1000	01/06/1990	37° 38'	13° 18'
Sicani: Lago di Prizzi	600-700	01/06/1990	37° 44'	13° 24'
Sicani: Bivio di Filaga	700	01/06/1990	37° 41'	13° 28'
Sicani: Gorgo Carcaci	800-900	01/06/1990	37° 42'	13° 30'
Sicani: Monte Carcaci	900-1100	01/06/1990	37° 42'	13° 29'
Chiusa Sclafani: Fiume Sosio	400	02/06/1990	37° 38'	13° 16'
Chiusa Sclafani: Portella Grande	400-500	02/06/1990	37° 39'	13° 15'
Vicari: neighborhoods	300-400	02/06/1990	37° 49'	13° 34'
Ficuzza: neighborhoods	850-1000	02/06/1990	37° 52'	13° 22'
Ficuzza: Bosco di Ficuzza	850-1000	02/06/1990	37° 52'	13° 24'
Ficuzza: Alpe Cucco	850-1000	02/06/1990	37° 52'	13° 24'
Rocca Busambra: cliffs	1100-1400	02/06/1990	37° 51'	13° 23'
Buonformello: neighborhoods	10-50	02/06/1990	37° 58'	13° 49'
Madonie: Fiume Himera	0-20	02/06/1990	37° 58'	13° 49'
Madonie: between Campofelice and Collesano	300-400	02/06/1990	37° 57'	13° 54'
Sciaccia: Gole della Tardara	50-200	02/06/1990	37° 33'	13° 00'
Monte Pizzuta: Grotta del Garrone	1000-1100	02/06/1990	37° 59'	13° 15'
Monte Pizzuta: slopes	1200-1300	02/06/1990	38° 00'	13° 15'
Monte Kumeta: slopes	900-1000	02/06/1990	37° 58'	13° 15'
Madonie: Quacella	1650-1800	03/06/1990	37° 51'	14° 00'
Madonie: Monte San Salvatore	1700-1800	03/06/1990	37° 50'	14° 03'



Table 1. continued.

Locality	Altitude (m a.s.l.)	Date	Latitude N	Longitude E
Madonie: Bivio Mongerrati	400-500	04/06/1990	37° 55'	13° 58'
Madonie: Collesano, Bosco Pedale	400-500	04/06/1990	37° 59'	14° 00'
Madonie: between Collesano and Lascari	200-400	04/06/1990	37° 57'	13° 54'
Madonie: near Isnello	400-500	04/06/1990	37° 56'	14° 00'
Madonie: Aquileia	300-400	04/06/1990	37° 56'	14° 03'
Madonie: Castelbuono, Rocca Lupa	350-400	04/06/1990	37° 57'	14° 06'
Madonie: near Castelbuono	800	04/06/1990	37° 55'	14° 05'
Madonie: Bosco di Castelbuono	900-1000	04/06/1990	37° 54'	14° 04'
Madonie: Castelbuono, Monticelli	800	04/06/1990	37° 53'	14° 04'
Madonie: Castelbuono, Gonato	900-1000	04/06/1990	37° 55'	14° 05'
Madonie: Castelbuono, Passo Scuro	700	04/06/1990	37° 55'	14° 06'
Madonie: Castelbuono, Barraca	700	04/06/1990	37° 55'	14° 05'
Madonie: Castelbuono, San Guglielmo	500-600	04/06/1990	37° 55'	14° 04'
Madonie: Castelbuono, Coprania	1200-1300	04/06/1990	37° 53'	14° 03'
Madonie: Monte Ferro	1200-1400	04/06/1990	37° 52'	14° 03'
Madonie: Piano Pomo	1200-1300	04/06/1990	37° 54'	14° 04'
Madonie: Piano Battaglia	1500-1600	05/06/1990	37° 52'	14° 00'
Madonie: Faggeta di Battaglia	1500-1600	05/06/1990	37° 52'	14° 02'
Madonie: Monte Carbonara	1800-1900	05/06/1990	37° 53'	14° 01'
Madonie: Baita del Faggio	1300-1400	06/06/1990	37° 52'	14° 00'
Madonie: Faguare	1200-1400	06/06/1990	37° 52'	14° 05'
Madonie: Canna	900-1100	06/06/1990	37° 52'	14° 04'
Madonie: Passo della Botte	1200-1400	06/06/1990	37° 51'	14° 03'
Madonie: Rocca di Mele	1600-1700	06/06/1990	37° 50'	14° 04'
Madonie: Piano Pomieri	1200-1300	06/06/1990	37° 51'	14° 03'
Madonie: Portella Mandarini	1200	06/06/1990	37° 51'	14° 06'
Madonie: Bozzolino	1000-1200	06/06/1990	37° 51'	14° 06'
Madonie: Margio Scorzone	1300-1400	06/06/1990	37° 50'	14° 08'
Madonie: Monte Catarineci, slopes	1000-1100	06/06/1990	37° 50'	14° 08'
Madonie: Geraci Siculo, Pietra Giordano	1400-1500	06/06/1990	37° 51'	14° 07'
Madonie: Geraci Siculo, San Cosimano	1300-1400	06/06/1990	37° 51'	14° 08'
Madonie: Geraci Siculo	1000-1100	06/06/1990	37° 51'	14° 09'
Madonie: Geraci Siculo, sughereta	800-900	06/06/1990	37° 53'	14° 08'
Madonie: near Castellana Sicula	600-700	06/06/1990	37° 47'	14° 02'
Madonie: Petralia Soprana, Gurgo di Pollicino	800-900	06/06/1990	37° 47'	14° 07'
Madonie: near Petralia sottana	800-1000	06/06/1990	37° 49'	14° 05'
Madonie: laghetto Xiremi	900-1000	06/06/1990	37° 47'	14° 02'
Madonie: between Castellana and Petralia Sottana	550-650	06/06/1990	37° 47'	14° 04'
Madonie: Nociazzi	800-900	06/06/1990	37° 48'	14° 02'
Madonie: Piano Zucchi	1000-1100	07/06/1990	37° 54'	13° 59'
Madonie: Monte Antenna Piccola	1000-1100	07/06/1990	37° 53'	14° 02'
Madonie: Portella Colla	1300-1500	07/06/1990	37° 52'	14° 00'
Madonie: between Portella Colla e Portella Serra	1500-1600	07/06/1990	37° 51'	14° 00'
Madonie: Comunello	650-750	07/06/1990	37° 52'	14° 00'
Madonie: between Petralia Sottana and Piano Battaglia	1000-1100	07/06/1990	37° 49'	14° 05'
Madonie: Vallone Madonna degli Angeli	1400-1500	07/06/1990	37° 50'	14° 01'
Madonie: Polizzi, Pietà	600-700	07/06/1990	37° 49'	14° 00'
Madonie: near Polizzi Generosa	700-800	07/06/1990	37° 48'	13° 59'
Nicosia: neighborhoods	600-700	08/06/1990	37° 44'	14° 23'
Madonie: near Gangi	700-800	08/06/1990	37° 47'	14° 12'

Table I. continued.

Locality	Altitude (m a.s.l.)	Date	Latitude N	Longitude E
Madonie: Gangi, Monte San Calogero	850-950	08/06/1990	37° 46'	14° 14'
Madonie: Gangi, gurgli di monte Zimmarra	1100-1200	08/06/1990	37° 45'	14° 15'
Sperlinga: neighborhoods	750-850	08/06/1990	37° 45'	14° 21'
Leonforte: neighborhoods	300-400	08/06/1990	37° 38'	14° 23'
Madonie: Alimena	300-400	08/06/1990	37° 41'	14° 06'
Madonie: near Blufi	300-400	08/06/1990	37° 45'	14° 04'
S. Caterina Villarmosa: Torrente Vaccarizzo	350	08/06/1990	37° 36'	14° 07'
Caltanissetta: Terrapilata	300-400	08/06/1990	37° 35'	13° 57'
Sutera: neighborhoods	600-700	08/06/1990	37° 31'	13° 44'
Caltanissetta: neighborhoods	300-400	08/06/1990	37° 30'	14° 03'
Milena: neighborhoods	400-500	08/06/1990	37° 27'	13° 44'
Montallegro: neighborhoods	100-200	08/06/1990	37° 23'	13° 21'
Ribera: neighborhoods	50-200	08/06/1990	37° 29'	13° 18'
Aragona: Maccalube	50-150	08/06/1990	37° 24'	13° 36'
Nebrodi: Fiume Troina	700-800	09/06/1990	37° 44'	14° 40'
Nebrodi: between Nicosia and Troina	600-700	09/06/1990	37° 49'	14° 32'
Nebrodi: Portella Femmina Morta	1500-1600	09/06/1990	37° 54'	14° 29'
Nebrodi: Tassita di Caronia	1500-1600	09/06/1990	37° 53'	14° 39'
Nebrodi: Portella Miraglia	1500-1600	09/06/1990	37° 54'	14° 39'
Nebrodi: Lago Maulazzo	1400-1450	09/06/1990	37° 57'	14° 41'
Nebrodi: Monte Soro	1500-1800	09/06/1990	37° 56'	14° 41'
Nebrodi: Biviere di Cesarò	1250-1450	10/06/1990	37° 57'	14° 43'
Nebrodi: near Cesarò	800-900	10/06/1990	37° 49'	14° 42'
Nebrodi: Portella Scafi	1300-1400	10/06/1990	37° 56'	14° 45'
Nebrodi: Mangalaviti	1500-1600	10/06/1990	38° 01'	14° 50'
Nebrodi: near portella Gazana	700-900	10/06/1990	38° 00'	14° 45'
Nebrodi: near Longi	600-700	10/06/1990	38° 01'	14° 45'
Nebrodi: near Mirto	400-500	10/06/1990	38° 05'	14° 45'
Nebrodi: near Galati Mamertino	700-800	10/06/1990	38° 01'	14° 45'
Nebrodi: near Tortorici	500-600	10/06/1990	38° 01'	14° 50'
Nebrodi: near Ucria	600-700	10/06/1990	38° 03'	14° 53'
Etna: near Nicolosi	500-600	11/06/1990	37° 36'	15° 00'
Etna: Zafferana Etnea	500-600	11/06/1990	37° 41'	15° 06'
Etna: Bosco di Milo	700-800	11/06/1990	37° 44'	15° 06'
Etna: Monti Sartorius	1600-1700	11/06/1990	37° 41'	15° 02'
Etna: Pineta di Linguaglossa	1400-1500	11/06/1990	37° 48'	15° 03'
Taormina: in the village	50-100	12/06/1990	46° 51'	15° 19'
Taormina: near Isola Bella	10-30	12/06/1990	37° 49'	15° 14'
Letojanni: Torrente	50-150	12/06/1990	37° 53'	15° 17'
Peloritani: Capo S. Alessio	10-50	12/06/1990	37° 54'	15° 20'
Peloritani: Castelmola	400-500	12/06/1990	37° 51'	15° 16'
Peloritani: Portella Mandrazze	400-500	13/06/1990	37° 55'	15° 22'
Peloritani: near Novara di Sicilia	600-700	13/06/1990	38° 01'	15° 07'
Messina: Fiumedinisi	300-400	13/06/1990	38° 01'	15° 23'
Peloritani: Monte Scuderi	800-900	13/06/1990	38° 03'	15° 24'
Randazzo: Lago Gurridda	850	14/06/1990	37° 54'	14° 53'
Randazzo: between Lago Gurridda and Fiume Alcantara	600-700	14/06/1990	37° 53'	14° 59'
Randazzo: neighborhoods	600-700	14/06/1990	37° 53'	14° 58'
Randazzo: between Randazzo and Cesarò	800-900	14/06/1990	37° 51'	14° 50'
Bronte: between Bronte and Adrano	650-750	14/06/1990	37° 45'	14° 49'

Table 1. continued.

Locality	Altitude (m a.s.l.)	Date	Latitude N	Longitude E
Catania: Highway PA-CT, Gerbini	40	14/06/1990	37° 25'	14° 50'
Randazzo: Fiume Flascio	900-1000	14/06/1990	37° 55'	14° 53'
Taormina: Fiume Alcantara	50-100	14/06/1990	37° 53'	15° 03'
Peloritani: Francavilla di Sicilia	300-400	14/06/1990	37° 54'	15° 08'
Sortino: Valle dell'Anapo	250-300	15/06/1990	37° 09'	15° 03'
Sortino: Vaccarizzo	250-300	15/06/1990	37° 07'	14° 29'
Buccheri: neighborhoods	600-700	15/06/1990	37° 07'	14° 52'
Siracusa: Fiume Ciane	0-20	15/06/1990	37° 02'	15° 14'
Vendicari: natural reserve	0-20	16/06/1990	36° 47'	15° 05'
Vendicari: seaside	0-5	16/06/1990	36° 47'	15° 05'
Porto Palo: neighborhoods	10-20	16/06/1990	36° 41'	15° 07'
Porto Palo: Pantani Longarini	0-10	16/06/1990	38° 35'	15° 05'
Pozzallo: neighborhoods	0-50	16/06/1990	36° 44'	14° 52'
Samperi: neighborhoods	50-150	16/06/1990	36° 43'	14° 44'
Scoglitti: neighborhoods	10-30	16/06/1990	36° 52'	14° 27'
Scoglitti: Passo Marinaro	20-40	16/06/1990	36° 52'	14° 27'
Ispica: neighborhoods	0-10	16/06/1990	36° 46'	14° 54'
Vittoria: neighborhoods	0-10	16/06/1990	36° 54'	14° 32'
Vittoria: Pineta di Vittoria	100-200	16/06/1990	36° 55'	14° 31'
Gela: Biviere	20-30	16/06/1990	37° 03'	14° 16'
Gela: Manfria	20-30	16/06/1990	37° 06'	14° 08'
Caltagirone: Bosco di Santo Pietro	250-300	17/06/1990	37° 07'	14° 29'
Messina: Savoca	400-500	17/06/1990	37° 57'	15° 19'
Messina: Roccalumera	0-50	17/06/1990	38° 03'	15° 24'
Messina: Antennamare	800-900	17/06/1990	38° 13'	15° 31'
Messina: Colle S. Rizzo	450-550	18/06/1990	38° 14'	15° 33'
Tindari: Oliveri	0-10	18/06/1990	38° 08'	15° 02'
Tindari: seaside	0-10	18/06/1990	38° 08'	15° 03'
Capo Calavà: neighborhoods	0-100	18/06/1990	38° 11'	14° 55'
S. Stefano di Camastra: neighborhoods	0-50	18/06/1990	38° 00'	14° 20'
Tusa: Milianni	0-30	18/06/1990	37° 59'	14° 14'
Madonie: Finale di Pollina	0-50	18/06/1990	38° 01'	14° 10'
Madonie: Rocca di Cefalù	30-100	18/06/1990	38° 02'	14° 01'
Madonie: between Gibilmanna and Cefalù	250-350	18/06/1990	38° 01'	14° 01'
Madonie: Gibilmanna	700-800	18/06/1990	37° 59'	14° 00'
San Nicola l'Arena: Torre Normanna	10-50	19/06/1990	38° 00'	13° 38'
Altavilla Milicia: neighborhoods	50-100	19/06/1990	38° 01'	13° 35'
Palermo: Bagheria, highway	30-50	19/06/1990	38° 05'	13° 30'
Mt. Catalfano: Eastward slope	200-300	19/06/1990	38° 06'	13° 31'
Mt. Catalfano: Solunto	100-200	19/06/1990	38° 06'	13° 30'
Mt. Catalfano: Cavallo Di Mezzo	50-150	19/06/1990	38° 06'	13° 31'
Mt. Catalfano: Irice	250-350	19/06/1990	38° 06'	13° 32'
Mt. Catalfano: Mongerbino	25-75	19/06/1990	38° 07'	13° 30'
Mt. Catalfano: between Mongerbino and Capo Zafferano	0-50	19/06/1990	38° 06'	13° 31'
Mt. Catalfano: Capo Zafferano	25-75	19/06/1990	38° 07'	13° 30'
Misilmeri: between Misilmeri and Bolognetta	200-300	19/06/1990	38° 00'	13° 27'

*dodonei*, *Rhynchocoris elephas* and the extremely rare *Petagnea gussonei*, endemic to such area.

June 11<sup>th</sup> was devoted to investigate the eastern slope of the Etna Mount overlooking the base point Nicolosi. Collections are made at Zafferana Etnea, in the Milo Wood, on the Sartorius Mountains and in the Linguaglossa Pinewood. Among the findings recorded, the following are here listed: *Celtis aetnensis*, *Erysimum aetnense*, *Betula aetnensis* (Fig. 3), *Astracantha sicula*, *Senecio aetnensis*, *Saponaria sicula*, *Anthemis aetnesis*, *Adenocarpus complicatus* subsp. *Complicatus* and *Viola aetnensis*.

On June 12<sup>th</sup>, scheduled as free day, some members of the group visited, apart from the well-known Taormina, some close localities (Letojanni, Capo Sant'Alessio and Castelmola) where plants particularly significant for the Ionian Sicilian coast were collected. *Salix gussonei*, *Centaurea tauromenitana* and *Brassica incana* are among the findings while, on the walls next to the public garden of Taormina, *Convolvulus sabadius*, *Asparagus medeloloides* and *Wingandia caracasana* specimens were gathered.

On June 13<sup>th</sup>, leaving the base Nicolosi and through the Ionian coast towards Itala, the group reached Scuderi Mount, the isolated limestone relief of the Peloritani Mountains. On the way, collections were made at Portella Mandrazze with a detour towards Novara di Sicilia and Fiumedinisi. Among the collected materials, the findings concerning *Fritillaria messanensis* (Fig. 5), *Plantago peloritana*, *Edraianthus graminifolius*, *Viola aetnensis* subsp. *messanensis* and *Tilia platiphyllos* are worthy mentioning.

On June 14<sup>th</sup>, the whole day was devoted to the investigation of the western slope of the Etna Mount and collections were made around Gurruda Lake, Randazzo, Bronte, Fiume Flascio, Fiume Alcantara and Francavilla di Sicilia. Noteworthy were the findings of *Consolida ajacis*, *Salix* ×*peloritana*, *Teucrium campanulatum*, *Eryngium barrelieri*, *Echium pustulatum*, *Sisymbriella dentata* and some *Ulmus* hybrids. Along the flight of steps of a church in Francavilla di Sicilia some specimens of *Erigeron karwinskianus* and *Nectaroscordium fragrans* were collected.

On June 15<sup>th</sup>, the Iter base was transferred from Nicolosi (Catania) to Portopalo (Siracusa), the extreme point of Sicily. On the route, some collections were made near Sortino and Buccheri, in the Anapo valley and on the Ciane River banks. Noteworthy were the findings of *Ferulago nodosa*, *Zelkova Sicula*, *Platanus orientalis*, *Salvia triloba*, *Cyperus papyrus* (Fig. 6) and *Putoria calabrica*.

June 16<sup>th</sup> was devoted to investigate the southern tip of Sicily (Vendicari, Portopalo, Pantani di Longarini, Pozzallo, Sampieri, Scoglitti, Vittoria). Some members of the local staff reach Manfredia (Gela). Among the collected materials, the findings concerning *Sarcopoterium spinosum*, *Allium lehmanni*, *Cichorium spinosum*, *Limonium sinuatum*, *L. syracusanum*, *L. hybleum*, *Asparagus stipularis*, *Quercus calliprinos*, *Rhus pentaphylla*, *R. tripartita*, *Mesembrianthemum cristallinum*, *M. nodiflorum*, *Cachrys sicula*, *Lobularia lybica*, *Suaeda agrigentina*, *Pinus halepensis*, *Cistus clusii*, *Pulicaria sicula*, *Lytrum tribracteatum*, *Muscari gussonei*, *Reamuria vermiculata* and *Retama raetam* subsp. *gussonei* are noteworthy.

On June 17<sup>th</sup> the group left the base point of Portopalo towards the Peloritani Mountains, collecting on the route, including the Santo Pietro wood in the Caltagirone territory, where specimens of *Echinophora tenuifolia*, *Stipa gussonei*, *Cistus incanus*, *Coris monspeliensis* and *Teucrium gussonei* were added to the collections.

In the afternoon, after arriving at the planned base point near Colle San Rizzo (Messina),



Fig. 5. The rare *Fritillaria messanensis* in the Peloritani Mountains.



Fig. 6. The characteristic umbel of *Cyperus papyrus* which occurs wild in the Ciane River near Siracusa.



Fig. 7. *Echinops spinosissimum* in the sandy shore at Oliveri-Tindari (Messina Province).

the group made collections in the area of the siliceous relief of Antennamare. Findings of rare bryophytes as well as *Adenocarpus complicatus* subsp. *commutatus* were gathered.

On June 18<sup>th</sup> – the closing day, following the Iter programme – collections were made firstly on the hills near San Rizzo and, left the Peloritani Mountains towards Cefalù, the new base point, also along the Tyrrhenian coast. The first stop was in proximity to Oliveri-Tindari, the lagoon environment, then at Capo Calavà, near Santo Stefano di Camastra, Tusa, Finale di Pollina, near the Cefalù Rock and at the bottom of Gibilmanna. The last day was spent, among the other things, on collecting the following interesting specimens: *Tuberaria lignosa*, *Cistus crispus*, *Senecio gibbosus* (Peloritani), *Echinops spinosissimus* (Fig. 7), *Cyperus laevigatus* subsp. *distachyos*, *Cymodocea nodosa* (Oliveri-Tindari), *Anthyllis barba-jovis*, (Santo Stefano) *Erucastrum virgatum*, *Senecio cineraria* (Tusa), *Aloe vera*, *Panicum compressum*, *Dactyloctenium aegyptium* (Rocca di Cefalù) *Astragalus echinatus*, *Viburnum tinus* and *Laurus nobilis* (at the bottom of Gibilmanna). After the conclusion of the Iter, on the morning of the 19<sup>th</sup> of June, some members of the group on their way to Palermo made further collections at Torre Normanna, Altavilla Milicia, Monte Catalfano, Capo Zafferano and Mongerbino. Among the plants collected, there were *Camphorosma monspeliaca*, *Quercus ×soluntina*, *Brassica rupestris* and *Matthiola incana* subsp. *rupestris*.

At midday the group moved to Palermo.

## Collections

During the Iter Mediterraneum, 2502 vascular plants (i.e. 1535 taxa) were collected by participants to expedition (their numbering runs from 1 to 2502) from 205 localities (Table 1). The members of the expedition agreed to deposit the gatherings at the following institutions:

1. *Herbarium Mediterraneum*, Università degli Studi di Palermo (Italy) (original set).
2. Departamento de Biología Vegetal y Ecología, Universidad de Sevilla (Spain).
3. Conservatoire et Jardin botaniques, Genève (Switzerland).
4. Botanischer Garten und Botanisches Museum, Berlin (Germany).
5. Plant Science Laboratories, University of Reading, (United Kingdom).
6. National Museum and Galleries on Merseyside, Liverpool (United Kingdom).
7. Istituto di Botanica, Università di Catania (Italy) (today Dipartimento di Botanica).

The duplicates will be separated and sent to the above-mentioned Institutions depending on their availability.

The bryophytes (486, not numbered, gatherings of musci, i.e. 187 taxa and 76 liverworts, i.e. 46 taxa) and the lichens (80 gatherings, i.e. 66 taxa) were taken care of respectively by Ruprecht Düll and Fabrizio Merlo which provided for their identification and labelling. The fungi (105 gatherings, i. e. 76 macrofungi) were identified by Giuseppe Venturella and Salvatore La Rocca. The latter, together with Alessandro Saitta also provided the report and the labelling. The original set is being kept at the *Herbarium Mediterraneum* in Palermo.

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