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## **DISCORSO COMMEMORATIVO DI MUZIO DE' TOMMASINI**

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Carlo MARCHESETTI

Discorso Commemorativo di MUZIO DE' TOMMASINI letto nel Congresso generale della Società Adriatica di Scienze Naturali dal Dr. Carlo Marchesetti.

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## **TOMMASINI NELLA VITA CIVILE E SOCIALE DI TRIESTE**

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Licia ZENNARO

**Keywords:** history of botany

**Abstract:** TOMMASINI IN THE CIVIL AND POLITICAL LIFE OF TRIESTE. At the end of the XVIII century Trieste was a small town with a population of about 30.000 inhabitans. The father of Tommasini came to Trieste in 1781 as a consul of the granducate of Tuscany and Muzio Tommasini was born in Trieste in 1794. He studied in Trieste, Ljubljana (as a pupil of the well known botanist Hladnik) and Vienna where he was in contact with Host (the Author of the fundamental *Flora Austriaca*, 1827-1831) but finally he became a doctor in law and performed his civil career as a magistrate. Appointed to the government in 1827, Tommasini was particularly for two decades; concerned with the sanitary problems of the impetuously growing town at the same time he explored thoroughly the local flora, collected an important herbarium and published the results of several botanical investigations. After the introduction of the constitution in 1850 Tommasini was elected as the first Mayor of the town and occupied this role until 1861. In these years the town developed as the principal trade centre of the Austrian Empire and the population grew to 100.000 people; otherwise the political success hindered Tommasini from elaborating a synthetic work about the flora and vegetation of the Illyrian region.

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## **PLANTAE TOMMASINIANAE**

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Erika PIGNATTI WIKUS

**Keywords:** Endemics, Iconography, Illyrian Flora, Tommasini

**Abstract:** Original drawings of species dedicated to Tommasini (1794-1879) and still regarded as valid in recent taxonomical literature. Most of them are endemics in the Illyrian region, in the Eastern Alps or on Northadriatic coast.

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## **ÜBERSICHT ÜBER DIE VEGETATION VEGETATION DES KARSTES VON TRIEST UND GÖRZ (NO-ITALIEN)**

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Livio POLDINI

**Keywords:** Vegetation, Karst, Trieste-Gorizia (NE-Italy)

**Abstract:** A brief account of the vegetation of the Karst in the surroundings of Trieste and Gorizia (Northeastern-Italy) is given here based on a phytosociological survey of the country. In the appendix there are some relevés of new associations.

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## **I COMPLESSI VEGETAZIONALI DEL TRIESTINO**

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Sandro PIGNATTI

**Keywords:** Assoziationskomplexe, Geosyntaxon, Illyria, landscape system, oecotope, Trieste

**Abstract:** The territory of Trieste (NE Italy) is constituted partly by limestone (with extended forms of erosion), partly by arenaceous substrates. Eight principal oecotopes have been recognized and in the same territory also eight vegetation complexes; each of them is preferring (but not exclusive) for a single oecotope. The Illyrian bush-formation (*Seslerio-Ostryetum* and *Carici-Centaureetum*) is largely diffused and appears in several distinct oecotopes. On the basis of vegetation and substrate it is possible to characterize the Illyrian landscape system.

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## **INDAGINI CARIOLOGICHE IN STACHYS RECTA L., S. LABIOSA BERTOL., S. SUBCRENATA VIS., S. FRAGILIS VIS.**

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Tiziana CUSMA VELARI, Duilio LAUSI

**Keywords:** chorology, cytotaxonomy, karyotypes, *Stachys recta* L. - complex

**Abstract:** KARYOLOGICAL STUDIES IN *STACHYS RECTA* L., *S. LABIOSA* BERTOL., *S. SURCRENATA* VIS., *S. FRAGILIS* VIS. Somatic chromosomes of some closely related taxa belonging to the *Stachys recta* - complex were investigated. Specimens were collected in populations growing in the Friuli Venezia Giulia region (NE-Italy). The chromosome number  $2n = 34$  of both *S. labiosa* Bertol. and *S. recta* L. is confirmed. The chromosomes numbers of *S. subcrenata* Vis.:  $2n = 34$  and *S. fragilis* Vis.:  $2n = 34$  are new. Discussions and remarks on the differences between the karyotypes of these taxa are given.

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## EINE NEUE DIPLOIDE VALERIANA OFFICINALIS - SIPPE IM ILLYRISCHEN RAUM

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Gabriela TURECEK, Eva TITZ, Walter TITZ

**Keywords:** Diploids, Illyrian Flora, *Valeriana officinalis*-race

**Abstract:** A NEW DIPLOID RACE OF *VALERIANA OFFICINALIS* IN THE ILLYRIAN REGION. A new diploid race of *Valeriana officinalis* is described for the illyrian region. Specimens belonging to the diploid race are morphologically very similar to the tetraploid race of the "collina" type. The main differences are: the absence of rhizomes, thicker roots and the higher maximal values of leaves length.

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## SCHEUCHZERIA PALUSTRIS L. NUOVA PER LE ALPI CARNICHE

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Renato GERDOL

**Keywords:** bogs, ecology, floristic, phytosociology

**Abstract:** SCHEUCHZERIA PALUSTRIS L. NEW TO THE CARNIC ALPS. In the Carnic Alps (North-East Italy) *Scheuchzeria palustris* has been found only in a very limited bog area. The vegetation in which it occurs may be referred to *Sphagno cuspidati - Caricetum limosae* (Osvald 1923) Krisai 1970.

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## ÜBER EINIGE NEUE ODER SELTENE ARTEN IN DER FLORA DER JULISCHEN ALPEN (IV)

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Tone WRABER

**Keywords:** Alpine vegetation, Eastern Alps vegetation, Eastern Alps flora

**Abstract:** SOME NEW OR RARE SPECIES IN THE FLORA OF THE JULIAN ALPS (IV). The Author communicates the presence of 5 species in the Julian Alps: *Bupleurum longifolium*, *Festuca pulchella* var. *angustifolia*, *Potentilla Arenaria* and *Pulsatilla alba* are new for the flora of the territory: for *Androsace Helvetica* a second locality is given. The sociological value of these species and their distribution in Slovenija are discussed.

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## GALIUM SETACEUM LAM. AUF DER INSEL MLJET - KROATIEN

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Ljudevit ILJIANIC

**Keywords:** Chorology, Croatian flora, *Galium setaceum*

**Abstract:** GALIUM SETACEUM LAM. IN THE ISLE OF MLJET- CROATIA. A new station of *Galium setaceum* Lam. is reported for the isle of Mljet (Croatia).

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## **ZUM GEDENKEN AN K. UND K. STATTHALTEREI-RATH IN TRIEST DR. MUTIUS RITTER VON TOMMASINI**

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Erwin AICHINGER

**Keywords:** flora of Trieste, *Orchidaceae*, vegetation belts

**Abstract:** *IN THE MEMORY OF DR. M. DE TOMMASINI IMPERIAL MAGISTRATE IN TRIESTE.* Critical enumeration of the Orchids growing in the Illyrian region on the basis of an original list published by Tommasini in 1851. The problem of the vegetation belts of this region is discussed. Ecology and geographical distribution of each species are indicated.

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## **VALUTAZIONE FITOSOCIOLOGICA DEGLI AGGRUPPAMENTI A CAREX BRACHYSTACHYS NELLE ALPI GIULIE OCCIDENTALI**

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Duilio LAUSI, Renato GERDOL

**Keywords:** *Cystopteridion*, endemism, numerical classification, phytosociology, rock crevice communities

**Abstract:** *PHYTOSOCIOLOGICAL EVALUATION OF THE CAREX BRACHYSTACHYS COMMUNITIES IN THE WESTERN JULIAN ALPS.* The mountain *Carex brachystachys* communities which colonize the cool, wet and shady rocks of the Western Julian Alps are phytosociologically described.

On the basis of a numerical classification this vegetation type has been assigned to *Caricetum brachystachyos* Lüdi 1921 and its endemic component discussed.

Theoretical remarks about the use of corological criteria in syntaxonomy are put in evidence.

## APERÇU SYNTAXONOMIQUE DE LA VEGETATION DES ROCHERS DE L'ESPACE ADRIATIQUE

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Ivo TRINAJSTIC

**Keywords:** Adriatic region, Rocky vegetation, Syntaxonomy, Phytosociology

**Abstract:** A SYNTAXONOMICAL SYNTHESIS OF THE ROCKY VEGETATION IN THE ADRIATIC REGION.  
A syntaxonomical synthesis of the rocky vegetation in the Adriatic Region is given. Two orders have been recognized, both included in the class *Asplenietea rupestris*: *Asplenietalia petrarchae* and *Centaurea Campanuletalia*. The order *Asplenietalia petrarchae* is represented by the alliance *Asplenion petrarchae* and the endemic association *Melico - Corydaletum acaulis* (isle of Lastovo). The order *Centaurea-Campanuletalia* includes two alliances *Centaureo-Campanilion* and *Centaureo-Porteschlagiellion*, with several associations.

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## SPATIAL PATTERN ANALYSIS OF ABANDONED GRASSLANDS OF THE KARST REGION BY TRIESTE AND GORIZIA

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Laura FEOLI CHIAPELLA, Enrico FEOLI, Paola GANIS, Angela SORGE

**Keywords:** Coenocline, Diversity, Gradients, Karst, Reforestation, Spatial pattern

**Abstract:** We have taken in consideration grasslands on flat or slightly sloped surface surrounded or interrupted by nuclei of reforestation (NR) of different areas (10-50 square metres). The results have shown that the influence of the single NR has no great importance on the changement of vegetation along the transects, but that considerable variations are due to the mean distance of the NR all round the grassland.

## ZUR VERBREITUNG UND BIOLOGIE DER FLECHTE CALOPLACA ANULARIS

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Josef POELT, Josef HAFELLNER

**Keywords:** *Caloplaca anularis*, chorology, ecology, lichens, morphology

**Abstract:** *DISTRIBUTION AND BIOLOGY OF THE LICHEN CALOPLACA ANULARIS.* *Caloplaca anularis*, described from the Western Alps in 1972, is reported for the first time from the Eastern Alps and the Balkan peninsula. The species grows always on steep calcareous rocks. There garlandlike, centrifugal, rarely fruiting thalli are built. On small projections of the rocks it grows rosulate and many apothecia are developed. The form of growing is connected with a deposit of excrets in the medulla and the hypothallus increasing towards the older parts of the thallus. The excrets deposited in the medulla and the hypothallus differ with the optical activity.

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## LA MICROFLORA ALGALE DELLE PARETI CALCAREE DEL FRIULI-VENEZIA GIULIA (ITALIA NORD-ORIENTALE)

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Loredana RIZZI LONGO, Livio POLDINI, Franca GOIA

**Keywords:** Lithophytic Algae, microphytic communities, North Adriatic Karst, phytosociology, *Scytonemo - Gloeocapsetum*

**Abstract:** *THE ALGAL MICROFLORA ON CALCAREOUS WALLS OF FRIULI - VENEZIA GIULIA (NE - ITALY).* The algal biotopes are mostly populated by *Cyanophytes*. The most abundant Algae are *Gloeocapsa* and *Scytonema*. Microphytic communities are described phytosociologically. The algal vegetation is similar to *Scytonemo - Gloeocapsetum* described by Golubić (1967). The lithophytic vegetation of three localities of different microecology is compared. Some difference with regard to the relative abundance of coccoid and filamentous species is detected.

## INDAGINE SUL CONTENUTO DI COLCHICINA IN COLCHICUM AUTUMNALE L. DELL'ITALIA SETTENTRIONALE

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Livio POLDINI, Laura COASSINI LOKAR, Franca TOMÈ, Maurizio PORRATI

**Keywords:** *Colchicum autumnale*, Liliaceae, alkaloids, Colchichine

**Abstract:** THE COLCHICINE CONTENT IN COLCHICUM AUTUMNALE L. OF NORTH ITALY. The colchicine content of different parts (bulb, flower, leaves, seeds, capsules) of *C. autumnale* L. has been identified. The specimens were collected in North Italy, in stations with different altitudinal, climatic and vegetational conditions. Colchicine is present in all the studied parts, with a concentration gradient going from a maximum in the seeds to a minimum in the bulbs. The colchicine content in the bulbs varies according to the principal phases of the life-cycle (flowering, fruiting, hudding), whereas in the seeds it depends from the degree of ripeness, being higher in the first stages. On the basis of results, it is suggested to take into consideration also leaves and flowers for the extraction of the alkaloid.

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## CHEMOTAXONOMY IN DRYOPTERIS AND RELATED FERN GENERA. Review and evaluation of analytical methods

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J.v. EUW, M. LOUNASMAA, T. REICHSTEIN, C.J. WIDÉN

**Keywords:** Chemotaxonomy, *Dryopteris*, Filicins, Phloroglucinol derivates

**Abstract:** The most important phloroglucinol derivatives ("filicins") isolated from rhizomes of *Dryopteris* species are discussed. The chemical analysis of *Dryopteris* rhizomes can (in conjunction with classical and cytological methods) provide valuable criteria for the solution of taxonomical problems, particularly as follows: 1. Identification of otherwise uncertain herbarium specimens. 2. Classification of critical taxa in a difficult complex. 3. Understanding of natural relations, including parents in hybrids and ancestors in allopolyploid species. Analytical methods are critically evaluated.

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