

**A REVISED CHECK-LIST**  
**of**  
**MALTESE ALGAE**

EDWIN LANFRANCO

## ERRATA CORRIGE

- P.10 for *Hyalodiscus stleliger* Bail.  
read *Hyalodiscus stelliger* Bail.
- P.15 for *Cystoseira tamariscifolia* (Huds.)  
read *Cystoseira tamariscifolia* (Huds.)Papenf.
- P.17 for Series: *Lithothamenia*  
read Series: *Lithophyllae*  
for Series: *Lithothamanie*  
read Series: *Lithothamniae*
- P.18 for *Pleonosporim* read *Pleonosporium*

With Compliments  
Edwin Paul

TO THE MEMORY  
OF  
THE COUNT DR. ALFREDO CARUANA-GATTO  
THIS WORK IS DEDICATED

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### **ABBREVIATIONS USED IN THIS WORK:**

Plants not included in the "Flora Melitensis Nova" are preceded by the following abbreviations which give the source of new records.

- B: Colin Balaam.
- C: Alan Cragg, as published in the "Sea Horse".
- CG: Alfredo Caruana Gatto; plants present in his herbaria but not included in the "Flora Melitensis Nova".
- L: The present writer, largely unpublished.
- UA: The "Underwater Association", mainly from their report "Malta '65".

Following the name:

- A: Aerial (out of water).
- B: Brackish Water.
- F: Fresh-water.
- M: Marine (if also in other habitats).
- P: Parasitic (A, B, F, following P give the habitat of the host if not marine).
- ?: Identity or occurrence uncertain.

All names not followed by letters refer to marine plants.



## PREFACE

Until very recently, Maltese Algae have not been given much attention.

Drs. Gavino and Giovanni Gulia working in the latter half of the 19th century produced some scattered notes and records on our algae in their various publications.

In 1915 appeared the 'Flora Melitensis Nova' by Dr. Stefano Sommier and Count Dr. Alfredo Caruana-Gatto. In this flora appeared a list of Maltese Algae which was compiled by Count Caruana-Gatto from specimens collected mainly by himself.

This list includes 296 species of algae which were grouped into Myxophyceae, Chlorophyceae, Glaucophyceae, Floridae and Zygothryxaceae (Cyanophyta, Chlorophyta p.p., Phaeophyta, Bangiophycidae p.p., Rhodophyta and Bacillariophyceae respectively of the present work) with no further subdivision, since this was intended to be only a preliminary list. This list forms the basis of the present work.

Since the publication of the 'Flora Melitensis Nova' no other comprehensive floristic account of our Algae has appeared.

In recent years teams from abroad come annually to Malta to carry out research in Marine Biology, including research on our Algae, chiefly from a physiological and biophysical viewpoint.

The present work is intended to be no more than a check-list of Algae which are known to date to exist in Malta. I have done my best to bring the nomenclature up to date (since many names have changed since 1915). I have also tried to classify the list as accurately as possible. I have made no attempt however to include any synonymy, or remarks on doubtful taxa. This I reserve for a larger work on our Algae which I hope to finish in the near future.

I must thank my brother Guido for his encouragement as well as for providing herbarium specimens; Mr. M'Angelo Delia, curator of the Argotti Botanic Gardens for allowing me to consult the herbaria of Dr. Caruana-Gatto; Miss Joan Camilleri, for providing specimens; Lt. Col. A. V. Mallia for letting me see his herbaria and Dr. Colin Balaam for providing data on Algae which he found in Malta during 1966.

EDWIN LANFRANCO





## INTRODUCTION

The Algae are a varied group of organisms. The fact that they are collectively known as Algae does not imply that the various groups are in any way related to one another. On the contrary some investigators would elevate each phylum to the status of kingdom. This proposition is quite feasible since "missing links" which abound in the Animal kingdom are practically absent from the "Plant kingdom". Technically, the term Alga means: An autotrophic (or holophytic) organism lacking a vascular system and which releases the zygote before commencement of cell division.

In the present work, the groups treated belong to two kingdoms: the Monera, which include the Cyanophyta and the Plantae which include all the other groups. The Monera also include non-algal organisms such as Bacteria while the Plantae include all organisms formerly regarded as plants with possible exception of the Fungi which are often segregated into a separate kingdom.

The algae can be classified as follows:

Kingdom: MONERA

Phylum: Cyanophyta      Class: Cyanophyceae \* (Blue-green algae)

Kingdom: PLANTAE (EUPHYTA)

Phylum: Euglenophyta      Class: Euglenophyceae (green flagellates)  
? Chloromonadophyceae

Cryptophyta      Cryptophyceae

Pyrrophyta      Dinophyceae (Dinoflagellates)

Desmophyceae

Chrysophyta      Chrysophyceae (golden-brown algae)

Haptophyceae (golden-brown algae)

Xanthophyceae \* (yellow-green algae)

Bacillariophyceae \* (Diatoms)

Phaeophyta      Phaeophyceae \* (brown algae)

Rhodophyta      Rhodophyceae \* (red algae)

Chlorophyta      Chlorophyceae \* (green algae)

Oedogoniophyceae \*

Bryopsidophyceae \* (Siphonaceous algae)

Conjugatophyceae \* (conjugating algae  
and desmids)

? Prasinophyceae

Charophyceae \* (stoneworts)

The classes followed by an asterisk (\*) are represented in this work. Those preceded by a point of interrogation (?) are of uncertain systematic position.

As can be appreciated, several classes are not represented in this work. This is not due to their absence from our Islands, since it seems that all groups are duly represented, but due to lack of records or to very scant records. It is evident therefore that a lot of work remains to be done to have a fair outline of all the Algae represented in Malta. This does not apply only to those classes which have been left out (these being composed almost entirely of unicellular plants) but also to those groups which include large or fairly large plants.

It is hoped that the present work will prove a useful reference to those wishing to study our Algae.

**Phylum: CYANOPHYTA**

Class: CYANOPHYCEAE

Order CHROOCOCCALES

Family: Chroococcaceae

- Gomphosphaeria aponina Kütz.
- Chroococcus turgidus (Ag.) Naeg. A F B M
- Chroococcus minor (Kütz.) Naeg. A
- Gloeocapsa ambigua Naeg. var.  
fuscolata Naeg. A F

Family: Entophysalidaceae

- Placoma vesiculosa Schousb.

Order: PLEUROCAPSALES

Family: Pleurocapsaceae

- Oncabyrsa adriatica Hauck.
- Pleurocapsa amethystea Rosenv.

Order: NOSTOCALES

Sub-order: Oscillatoriiineae

Family: Oscillatoriaceae

- Spirulina subsalsa Oersted.
- Oscillatoria brevis (Kütz.) Gom.  
var. neapolitana Gom.
- L Oscillatoria sp. A F
- Phormidium autumnale (Ag.) Gom. F A B M
- Lyngbya confervoides Ag.
- Lyngbya semiplena (Ag.) J. Ag.
- L Hydrocoleum sp.
- Schizothrix vaginata (Naeg.) Gom. A B M
- Microcoleus paludosus (Kütz.) Gom. A
- L Microcoleus sp.

Sub-order: Nostociineae

Family: Nostocaceae

- Nostoc commune Vauch. A
- L Nostoc muscorum Kütz. A
- Nostoc microscopicum Corn. A
- L Nostoc sp. A F
- L Anabaena sp. A F

Family: Scytonemataceae

- Scytonema occlatum Lyngb. A
- Scytonema cinereum Menegh. A

Family: Rivulariaceae

- Calothrix aeruginea (Kütz.) Thur.
- Dicothrix orsiniana (Kütz.) B. & F. A
- L Dicothrix gysophila Born. & Flah.
- Sacconema rupestre Borzi. A M

**Phylum: CHRYSOPHYTA**

Class: XANTHOPHYCEAE

Order: HETEROSIPHONALES

Family: Phyllosiphonaceae

Phyllosiphon arisarii Kühn. P-A

Family: Botrydiaceae

L Botrydium granulatum (L.) Grev. A

Family: Vaucheriaceae

Vaucheria sessilis D.C. F

Vaucheria repens Han. F B

Vaucheria terrestris Dill. A

L Vaucheria sp.

Class: BACILLARIOPHYCEAE

Sub-Class: CENTRICAEE

Order: COSCINODISCALES

Family: Melosiraceae

Hyalodiscus ~~stelliger~~ Bail. *stelliger*

Podosira ambigua Grün.

Podosira hormoides Mont.

Family: Coscinodiscaceae

Pyxidicula mediterranea Grün.

Coscinodiscus radiatus Ehr.

Coscinodiscus excentricus Ehr.

Coscinodiscus nitidus Greg.

Coscinodiscus concavus Greg.

Actinoptychus splendens Ralfs.

Actinoptychus undulatus Ehr.

Actinocyclus ehrenbergii Ralfs.

Order: BIDDULPHIALES

Family: Biddulphiaceae

Biddulphia pulchella Gray.

Buddulphia (Cerataulus) smithii (Ralfs.) Van Heurck

Biddulphia (Amphitetras) antediluviana (Ehr.) V.H.

Biddulphia (Triceratium) shadboltianum Grev.

Sub-Class: PENNATAE

Order: FRAGILARIALES (ARAPHIDALES)

Family: Fragilariaceae

Fragilaria brevistriata Grün.

var. pusilla Gm. F

- Synedra affinis* Kütz. M B  
*Synedra gracilis* Grün.  
L *Synedra vaucheriae* Kütz.  
var. *perminuta* Grün. F  
L *Synedra uina* (Nitzsch) Ehr. F  
*Ardissonia baculus* Greg.  
*Ardissonia crystallina* (Lyngb.) Kütz.  
*Ardissonia formosa* Kütz.  
*Ardissonia fulgens* (Kütz.) W.Sm.  
*Ardissonia robusta* Ralfs.  
*Toxarium undulatum* (Bail.) Greg.

Family: Licmophoraceae

- Climacosphenia elongata* Bail.  
L *Climacosphenia monilifera* Ehr.  
*Licmophora flabellata* Agardh.  
*Licmophora dalmatica* (Kütz.) Grün.  
*Licmophora dal.* var. *tenella* Kütz.  
*Licmophora gracilis* (Ehr.) Grün.  
*Licmophora communis* (Heib.) Grün.  
*Licmophora lyngbyei* Grün. var. *elongata* Bail.  
*Licmophora lyng.* var. *minor* Grün.

Family: Tabellariaceae

- Rhabdonema adriaticum* Kütz.  
*Striatella delicatula* (Kütz.) Grün.  
L *Tabellaria fenestrata* (Lyngb.) Kütz.  
var. *asterionelloides* Grün F  
*Grammatophora macilenta* Ehr.  
*Grammatophora oceanica* Ehr.  
var. *vulgaris* Grün.  
*Grammatophora oc.* var. *nodulosa* Grün.  
*Grammatophora oc.* var. *minuscula* Perag.  
*Grammatophora marina* (Lyngb.) Kütz.  
*Grammatophora gibberula* Kütz.  
*Grammatophora serpentina* Ehr.

Order: ACHNANTALES (MONORAPHIDALES)

Family: Achnantaceae

- Achnantes longipes* Ag.  
*Achnantes subsessilis* Kütz.  
*Rhoicosphaenia curvata* Grün. F M  
*Cocconeis pellucida* Hantz.  
*Cocconeis pseudomarginata* Greg.  
*Cocconeis scutellum* Ehr.  
*Cocconeis molesta* Kütz.  
*Cocconeis crucifera* Grün.

<i>Cocconeis pediculus</i> Ehr.	F	B
<i>Cocconeis dirupta</i> Greg.		
<i>Cocconeis dir.</i> var. <i>flexella</i> Greg.		
<i>Campyloneis grevillei</i> (Sm.) Grün.		
<i>Orhoneis binotata</i> Grün.		
<i>Orhoneis Splendida</i> Grün.		

Order: NAVICULALES (BIRAPHIDALES)

Family: Cymbellaceae

<i>Epithemia masculus</i> Kütz.		
<i>Cymbella affinis</i> Kütz.	F	
<i>Amphora proteus</i> Greg.		
<i>Amphora veneta</i> Kütz.		
<i>Amphora crassa</i> Greg.		
<i>Amphora granulata</i> Greg.		
<i>Amphora lineata</i> Greg.		
<i>Amphora marina</i> Sm.		
<i>Amphora obtusa</i> Greg.		
<i>Amphora arenaria</i> Donk.		
<i>Amphora costata</i> Sm.		

Family: Naviculaceae

sub-family: Amphiprorea

<i>Mastogloja apiculata</i> W.Sm.		B
<i>Mastogloja bisculata</i> Grev. var. <i>corsicana</i> Grün.		
<i>Mastogloja ovata</i> Grün.		
<i>Mastogloja quinquecostata</i> Grün.		
<i>Stauroneis acuta</i> Sm.	F	
<i>Pleurosigma balticum</i> Sm.		
<i>Pleurosigma decorum</i> Sm.		
<i>Pleurosigma rigidum</i> W.Sm.		B M
L <i>Pleurosigma</i> sp.	F	
<i>Rhoicosigma oceanicum</i> Perag.		
<i>Amphiprora lepidoptera</i> Greg.		

sub-family: Naviculeae

<i>Scoliopleura tumida</i> (Breb.) Rab.		
<i>Navicula apis</i> Dank.		
<i>Navicula bombus</i> Ehr.		
<i>Navicula crabro</i> Ehr.		
<i>Navicula didyma</i> Kütz.		
<i>Navicula formosa</i> Greg.		B M
<i>Navicula fusca</i> Greg.		
<i>Navicula gemina</i> Kütz.		
<i>Navicula gemmatula</i> Grün.		
<i>Navicula komorthensis</i> Grün.		
<i>Navicula liber</i> Sm. var. <i>tenuistriata</i>		

*Navicula lineata* Donk.  
*Navicula littoralis* Donk.  
*Navicula lyra* Ehr.  
*Navicula mutica* Kütz. var. *producta* Grün. B  
*Navicula nitescens* Greg. var. *stricta* Perag.  
*Navicula notabilis* Greg. var. *expleta* Perag.  
*Navicula pandura* Breb.  
*Navicula pupula* Kütz.  
*Navicula splendida* Greg.  
*Navicula smithii* Breb.  
*Navicula vetula* A.S.  
*Berkeleya micans* Grün.  
*Trachyneis aspera* Cleve.

Family: Gomphonemataceae

<i>Gomphonema augustatum</i> Kütz.	F	M
<i>Gomphonema olivaceum</i> Kütz.	F	M
<i>Gomphonema oliv.</i> var. <i>vulgare</i> Grün.	F	M
<i>Gomphonema subramosum</i> Kütz.		

Order: SURIRELLALES

Family: Surirellaceae

<i>Podocystis adriatica</i> Kütz.		
<i>Surirella fastuosa</i> Ehr.		
<i>Surirella gemma</i> Ehr.		
<i>Surirella ovalis</i> Breb.	F	B
<i>Campylodiscus decorus</i> Breb.		
<i>Campylodiscus ralfsii</i> W.Sm.		
<i>Campylodiscus samoensis</i> Grün.		
<i>Campylodiscus thuretii</i> Breb.		

Family: Nitzchiaceae

<i>Homeocladia vidovichi</i> Grün.		
<i>Nitzschia panduriformis</i> Greg.		
<i>Nitzschia fasciculata</i> Grün.	B	M
<i>Nitzschia sigma</i> W.Sm.	B	
L <i>Nitzschia sigma</i> var. <i>rigidula</i> Grün.	F	
<i>Nitzschia denticula</i> Grün.	F	
<i>Nitzschia spathulifera</i> Grün.		
<i>Bacillaria paradoxa</i> Gmel.	F	B M
<i>Hantzschia amphioxys</i> Grün.	F	

Note: *Navicula apis*, *bombus*, *crabro*, *didyma*, *pandura*, *gemmatula*, *splendida* and *lineata* are often placed in the genus: *Diploneis*. *Navicula liber* and *formosa* are often placed in the genus: *Caloneis*.

**Phylum: PHAEOPHYTA**

Class: PHAEOPHYCEAE

Sub-class: ISOGENERATAE

Order: ECTOCARPALES

Family: Ectocarpaceae

- Ectocarpus siliculosus (Dillw.) Lyngb.
- Ectocarpus confervoides (Roth) Le Jol.
- CG "Ectocarpus sterilis" ?
- L Feldmannia lebelli (Aresch.) Hamel
- L in CG Spongonema tomentosus (Huds.) Kütz. 1

Order: SPHACELARIALES

Family: Sphacelariaceae

Sphacelaria cervicornis Ard.

Family: Stypocaulaceae

- Halopteris scoparia (L.) Ag.
- UA Halopteris filicina (Grat.) Kütz.

Family: Cladostephaceae

- UA Cladostephus verticillatus J. Ag.

Order: DICTYOTALES

Family: Dictyotaceae

- Taonia atomaria (Good. & Wood.) Ag.  
fma. ciliata Kütz.
- UA, C Zonaria flava (Clem.) Ag.
- Padina pavonia (L.) Lamour.
- Dictyopteris membranacea (Stackh.) Batt.
- Dilophus fasciola (Roth.) Howe.
- L Dilophus repens J. Ag.
- Dictyota dichotoma (Huds.) Lamour.
- L Dictyota dich. var. implexa J. Ag.
- Dictyota linearis (Ag.) Grev.

Sub-Class: HETEROGENERATAE

Infraclass: Haplostichineae

Order: CHORDARIALES

Family: Mesogloiaceae

Castagnea mediterranea (Kütz.) Hauck.

Family: Stilophoraceae

Stilophora adriatica Ard.



Order: SPOROCHNALES

Family: Sporochneaceae

*Sporochnus pedunculatus* (Huds.) Ag.

Infraclass: Polystichineae

Order: PUNCTARIALES

Family: Punctariaceae

*Punctaria latifolia* Grev.

Family: Scytosiphonaceae

*Scytosiphon lomentarius* (Lyngb.) J. Ag.

*Petalonia fascia* (Müller) O. Kunth.

var. *debilis* (Ag.) Hauck.

*Colpomenia sinuosa* (Roth.) Derb. et Solier.

Sub-Class: CYCLOSPOREAE

Order: FUCALES

Family: Cystoseiro-Sargassaceae

*Sargassum acinarium* (L.) Ag.

*Sargassum vulgare* Ag.

*Sargassum hornschurchii* Ag.

*Sargassum natans* (L.) Börg.

?

*Cystoseira concatenata* Ag.

*Cystoseira hoppii* Ag.

*Cystoseira montagnei* val.

C *Cystoseira discors* (L.) Ag.

?

B *Cystoseira barbata* J. Ag.

L *Cystoseira crinita* Valiante

*Cystoseira tamariscifolia* (Huds.) Papenf.

*Cystoseira mediterranea* (Ag.) Sauv.

*Cystoseira abrotanifolia* Ag.

L *Cystoseira* ab. ssp. *plana* Ercegovic.

L *Cystoseira* ab. ssp. *pustulata* Ere.

- 
1. This plant is present in the herbarium of Dr. A. Caruana-Gatto but under an erroneous identification.

**Phylum: RHODOPHYTA**

Class: RHODOPHYCEAE

Sub-Class: BANGIOPHYCIDAE

Order: PORPHYRIDIALES

Family: Porphyridiaceae

Porphyridium cruentum (Ag.) Naeg. A

Order: GONIOTRICHALES

Family: Goniotrichaceae

Goniotrichum elegans (Chav.) Zan.

Asterocytis ramosa (Thwait.) Gobi B M

Order: BANGIALES

Family: Erythropeltidaceae

Erythrotrichia investiens (Zan.) Bory.

Erythropeltis discigera (Benth.) Sch.

Family: Bangiaceae

L Bangia fuscopurpurea Lyngb. ?

Porphyra leucosticta Thur.

Porphyra laciniata Agardh.

UA Porphyra perforata J. Ag.

Sub-Class: FLORIDEOPHYCIDAE

Order: GELIDIALES

Family: Gelidiaceae

CG Gelidium corneum Lamour.

Gelidium latifolium Born. et Thuret.

Gelidium crinale (Turn.) Lamour.

Pterocladia capillacea (Gmel.) Born.

Order: CRYPTONEMIALES

Family: Squamariaceae

UA Peysonnelia squamaria Desv.

Peysonnelia rubra J. Ag.

Contarinia peysonneliaeformis Zan.

Family: Corallinaceae

Sub-family: Corallineae

Corallina mediterranea Aresch.

Corallina med. var. spathulifera Kütz.

Jania rubens (L.) Lamour.

B Jania longifurca Zan.

Amphiroa rigida Lamour.

Amphiroa cryptarthrodia Zan.

Amphiroa beauvoisii Lamour.

Sub-family: Melobesieae

Series: ~~Lithothamnia~~ *Lithophyllae*

UA Lithophyllum incrustans Phil.  
Dermatolithon pustulatum (Lamour.) Fosl.  
Dermatolithon pust. var. crinitum Moeb.

Series: Lithotham<sup>niae</sup>~~niae~~

Lithothamnion polymorphum Ard.  
B Lithothamnion lenormandii (Aresch.) Fosl.

Series: Mastophorae  
Melobesia farinosa Lamour.

Choreonema thuretii Schmitz.

P

Series: Epilithonae  
Epilithon membranaceum (Esp.) Heydr.

Family: Grateloupiaceae

Grateloupia dichotoma J. Ag. fma. nana Ard.  
CG Halymenia floresia (Clem.) Ag.

Family: Callymeniaceae

L in CG Callymenia microphylla J. Ag.

Order: GIGARTINALES

Family: Gracilariaceae

Gracilaria confervoides Grev.

Family: Plocamiaceae

Plocamium coccineum Lyngb.

Family: Sphaerococcaceae

Sphaerococcus coronopifolius C. Ag.  
Caulacanthus ustulatus Kütz.

Family: Furcellariaceae

Neurocaulon reniforme (Post. & Rupr.) Zan.

Family: Hypneaceae

Hypnea musciformis (Wulf.) Lamour.

Family: Phylloporaceae

Phyllophora nervosa Grev.

Family: Gigartinaceae

Gigartina acicularis (Wulf.) Lamour.

Order: RHODYMENIALES

Family: Rhodymeniaceae

- B Rhodymenia palmetta (Esp.) Grev.  
Rhodymenia corallicola Ard.
- L Botryocladia uvaria (Wulf.) Kylin.

Family: Champiaceae

- Chylocladia verticillata (Light.) Blid.
- Chylocladia squarrosa (Kütz.) Le Jol.
- Chylocladia sq. var. moniliformis Ard.
- Gastroclonium clavatum (Roth.) Ard.

Order: CERAMIALES

Family: Ceramiaceae

Series: Crouaniae

- L Crouania attenuata (Bonnem.) J. Ag.

Series: Ceramiae

- Ceramium elegans Ducl.
- Ceramium strictum Grev. et Harv.
- Ceramium derbesii Solier.
- Ceramium diaphanum (Roth.) Harv.
- Ceramium gracillimum Grev. et Harv.
- Ceramium circinatum (Kütz.) Ag.
- Ceramium echionotum (Kütz.) Ag.
- Ceramium ciliatum Ducluz.
- Centroceras clavulatum (Ag.) Mont.

Series: Spyridiae

- Spyridia filamentosa Harv.

Series: Wrangeliae

- Wrangelia penicillata Ag.

Series: Callithamniae

- Callithamnion granulatum Harv.

Series: Compsothamniae

- Pleonosporium borneri (Sm.) Naeg.

Series: Griffithsiae

- Neomonospora furcellata (J. Ag.) Feld. & Mesl.

Family: Delesseriaceae

sub-family: Dellessarieae

Series: Hypoglossae

- Hypoglossum woodwardii Kütz.

sub-family: Nitophylleae

Series: Nitophyllae

- Nitophyllum punctatum Harv.

Series: Cryptopleuræ

- Acrosorium uncinatum (J. Ag.) Kylin.

Family: Dasyaceae

- Dasya arbuscula Ag.
- Dasya rigidula Ard.
- Dasya punicea Menegh.
- Dasyopsis plana Lamour.
- CG Dasyopsis penicillata Schinz.
- Heterosiphonia wurdemanni Falk.

Family: Rhodomelaceae

Series: Polysiphoniae

- Polysiphonia subulifera Harv.
- Polysiphonia subcontinua J. Ag.
- Polysiphonia spinosa Ag.
- Polysiphonia sanguinea (Ag.) Zan.
- Polysiphonia opaca (Ag.) Zan.
- Polysiphonia elongata Harv.
- Polysiphonia variegata Zan.
- Polysiphonia castelliana De Not.
- Polysiphonia sertularioides (Grat.) J. Ag.
- CG Polysiphonia divergens J. Ag.
- Börghesiella fruticulosa (Wulf.) Kylin.
- Alsidium corallinum J. Ag.
- Alsidium helminthochorton Kütz.

Series: Pterosiphoniae

- Pterosiphonia pennata Falk.

Series: Herposiphoniae

- Herposiphonia secunda (Ag.) Naeg.
- Herposiphonia tenella (Ag.) Kütz.

Series: Lophosiphoniae

- Lophosiphonia subadunca (Kütz.) Falk.  
var. cristata DeToni

Series: Amansiae

- L Halopithys pinastroides (Gmel.) Kütz.
- Rhytiphlaea tinctoria (Clem.) Ag.
- Vidalia volubilis (L.) Ag.

Series: Chondriae

- Chondria tenuissima J. Ag.
- Chondria boryana (De Not.) De Toni

Series: Laurenciae

- Laurencia obtusa Ard.
- Laurencia obt. var. gracilis Ard.
- Laurencia papillosa Lamour.
- Laurencia pinnatifida Lamour.
- Laurencia pinn. var. osmunda J. Arg.

**Phylum: CHLOROPHYTA**

Class: CHLOROPHYCEAE

Order: VOLVOCALES

Sub-order: Chlamydomonadiidae

Family: Chlamydomonadaceae

Chlamydomonas pertyi Gor. F

Order: TETRASPORALES

Family: Tetrasporaceae

UA Palmophyllum crassum (Nacc.) Rab.

Family: Palmellaceae

L Palmella sp. A F

Order: CHLOROCOCCALES

Family: Endosphaeriaceae

Chlorochytrium lemnae Cohn. P-F

Family: Oocystaceae

L Zoochlorella conductrix Brandt. In Hydra viridis

Family: Chlorococcaceae

L Chlorococcum humicola (Naeg.) Rab. A F

Trebouxia cladoniae (Chod.) Sm. In lichens

Family: Protosiphonaceae

Protosiphon botryoides (Kütz.) Klebs. A

Order: ULOTHRICALES

Family: Ulothricaceae

L Hormidium sp. F

Family: Microsporaceae

Microspora fortinalis De Toni F

Family: Cylindrocapsaceae

L Cylindrocapsa sp. F ?

Order: CHAETOPHORALES

Family: Chaetophoraceae

Enododerma viride (Reink.) Lag. P-M

Phaeophila dendroides  
(Crouan.) Batt. P-M

Family: Protococcaceae

Pleurococcus tectorum Tem. A

Pleurococcus vulgaris Menegh. A

Family: Coleochaetaceae

Coleochaete scutata Breb. F

Coleochaete orbicularis Prings. F

Order: ULVALES

Family: Ulvaceae

- Ulva lactuca (L.) Le Jol.  
Ulva rigida Agardh.  
UA Ulva fasciata Del.  
Enteromorpha intestinalis (L.) Link. B M  
Enteromorpha intestinalis  
var. cylindracea Ag. B M  
Enteromorpha compressa (L.) Grev.  
Enteromorpha linza (L.) Ag.  
Enteromorpha Clathrata (Roth.) Ag.  
Enteromorpha salina Kütz.

Class OEDOGONIOPHYCEAE

Order: OEDOGONIALES

Family: Oedogoniaceae

- L Oedogonium sp. F

Class: BRYOPSIDOPHYCEAE

Order: CHLADOPHORALES

Family: Cladophoraceae

- Cladophora glomerata (L.) Kütz. F  
Cladophora flavescens (Ag.) Rab.  
Cladophora sericea (Huds.) Kütz.  
Cladophora heterocladia Kütz. F  
Cladophora fracta (Billw.) Kütz. F  
Cladophora fracta  
var. gossypina (Drap.) Rab. F  
Cladophora insignis (Ag.) Kütz. F  
Cladophora catenata (Ag.) Hauck.  
Cladophora hamosa Kütz.  
Cladophora trichocoma Kütz.  
Cladophora ramosissima (Drap.) Kütz.  
Cladophora penicillata Kütz.  
Cladophora utriculosa Kütz.  
Cladophora prolifera (Roth.) Kütz.  
Rhizoclonium hieroglyphicum  
Kunth. F  
Rhizoclonium riparium (Roth.)  
Harv.  
Lola implexa (Harv.) Hamel. B M  
Chaetomorpha linum (Müll.) Kütz.  
Chaetomorpha chlorotica Hauck.  
L Chaetomorpha crassa (Ag.) Kütz.  
Chaetomorpha gracilis Kütz.  
Chaetomorpha aerea Kütz. ?

Family: Anadyomenaceae  
Anadyomene stellata (Wulf.) Ag.

Order: SIPHONOCLADALES

Family: Siphonocladaceae  
Siphonocladus psyttaliensis Schmitz.  
L Cladophoropsis sp. B ?  
Family: Valoniaceae  
L Valonia utricularis (Roth.) Ag.

Order: DASYCLADALES

Family: Dasycladaceae  
C L Acetabularia mediterranea Lamour.  
L Dasycladus clavaeformis Ag.

Order: CAULERPALES (SIPHONALES, BRYOPSIDALES)

Family: Halicystidaceae (Derbesiaceae)  
Derbesia lamourouxii (J. Ag.) Solier.  
Family: Bryopsidaceae  
Bryopsis disticha (J. Ag.) Kütz.  
Bryopsis cupressoides Kütz.  
Bryopsis plumosa (Huds.) Ag.  
Bryopsis muscosa Lamour.  
Family: Codiaceae  
Codium tomentosum (Huds.) Ag.  
L Codium elongatum Ag.  
Codium bursa (L.) Ag.  
Halimeda tuna (Ell. et Sol.) Lamour.  
Family: Udoteaceae  
Udotea petiolata (Turra.) Börgesen.  
Family: Caulerpaceae  
Caulerpa prolifera Lamour.

Class: CONJUGATOPHYCEAE

Order: ZYGNEMATALES

Family: Zygnemaccae  
Spirogyra varians Kütz. F  
L Spirogyra sp. F  
Zygnema pectinata Agardh. F

Order: DESMIDIALES

Family: Desmidiaceae  
L Closterium sp. F  
Cosmarium meneghini Breb. F  
L Cosmarium sp. F  
L Penium sp. F



Class: CHAROPHYCEAE

Order: CHARALES

Family: Characeae

sub-family: Chareae

*Chara fragilis* Desf. F

*Chara vulgaris* L. F

*Chara foetida* Al. Br. F

*Chara gymnophylla* Al. Br. F

sub-family: Nitelleae

*Nitella flexilis* Ag. F

*Tolypella nidifica* Al. Br. F  
var. *condensata* Al. Br. F

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- Note: References prior to the publication of the "Flora Melitensis Nova" will be found in the extensive bibliography of that work.