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Research Article

A Revised Appraisal of Scientific Names Used in the 1915 List of Lichens of the Maltese Islands by S. Sommier and A. Caruana Gatto

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Abstract. In 1915, Stefano Sommier and Alfredo Caruano Gatto published a list of lichens from the Maltese Islands. This author published an appraisal of the scientific names used in their list in 2002. The present work aims to replace the previous work given the important changes which have occurred in lichen nomenclature.

Keywords: Maltese Islands, lichens, checklist, endemism

1 Introduction

Stefano Sommier (1848–1922) was a traveller, collector and once-director of the Istituto Botanico, University of Firenze. In 1906 and 1907 he visited the Maltese Islands to explore the local vegetation. Alfredo Caruana Gatto, a local lawyer and naturalist, joined Sommier on his excursions to the different islands where amongst others they collected lichens. In 1915 Stefano Sommier and Alfredo Caruana Gatto included a list of 183 local lichens in the second volume of their publication *Flora Melitensis Nova* (Sommier & Caruana Gatto, 1915).

The listed lichens had been sent to Antonio Jatta for identification, as revealed in the footnote that accompanies their checklist:

"I licheni raccolti quasi tutti da uno di noi (CG.), sono stati determinati dal compianto Dott. A. Jatta, ed una parte di essi si trova citata sia in ≪Materiali per un censimento generale dei Licheni Italiani≫ sia nella ≪Flora Italica Cryptogama Pars III (Lichenes)≫ dello stesso Jatta. Abbiamo seguito la nomenclatura e l'ordine adottati da Jatta nella Flora Italica Cryptogama, ed abbiamo citato i suddetti lavori per le specie delle quali vi é detto che si trovano nelle Isole Maltesi." (Sommier & Caruana Gatto, 1915).

Records of the lichen species collected by Sommier and Caruana Gatto appeared in Flora Italica Cryptogama (Jatta, 1909-11) four years before being published in *Flora Melitensis Nova* (Sommier & Caruana Gatto, 1915). Antonio Jatta himself died in 1912. The Herbarium Jatta at the Orto Botanico in Naples still conserves a number of lichens from Malta.

To date, Sommier and Caruana Gatto's checklist (Sommier & Caruana Gatto, 1915) remains the only local publication which gives an idea of the lichen biodiversity that existed in our islands around a century ago. In Fiorentino (2002), the present author reviewed this checklist and where relevant and possible, suggested current scientific names for the listed lichens. Since then lichen taxonomical nomenclature has undergone considerable changes, and this is likely to go on changing due to the application of molecular phylogeny to lichenised fungi. In turn, the preceding is leading to changes in the scientific name of numerous lichens.

The best way to discover which lichens were growing on our islands in 1915 would be to go through the collection deposited by Alfredo Caruana Gatto at the University Argotti Herbarium (ARG), Floriana. However, the lichens would first need to be identified since most of the labels in this Herbarium are missing or misplaced. A much smaller and well-labelled lichen collection is housed at the Museum of Natural History (NMNH) at Mdina. A note found with this collection says that the lichens had been collected by Surgeon Rear Admiral Sir Reginald Bankart in 1927 and identified by the lichenologist Annie Lorrain Smith.

This present author is involved in an ongoing project which aims to collect and identify the lichens present in the Maltese Islands. This will eventually lead to an updated lichen checklist which can only be compared to Sommier & Caruana Gatto's checklist once the scientific names of the latter are converted to current ones.

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2 Methodology

In this work, I have made a second attempt to review the lichen names listed in Sommier and Caruana Gatto (1915) and to replace them, where possible, with those which are currently considered valid. For obvious reasons the updated version does not correct any misidentifications, but a comment is given under the notes section whenever any identification looks dubious.

The nomenclature adopted in this work follows that found in *Lichens of Italy – a second annotated catalogue* (Nimis, 2016). Other resources used were: *A Second Checklist of the Lichens of Italy* (Nimis & Martellos, 2003); *The Global Fungal Nomenclator* (Index Fungorum, 2017); *Lichens of Italy* (Nimis, 1993); *IT-ALIC – The Information System on Italian Lichens* (Nimis & Martellos, 2017) and *MycoBank* (Crous, Gams, Stalpers, Robert & Stegehuis, 2004). Additional references are specified in the notes section.

3 Results

Table 1 gives the original list of lichens in Sommier and Caruana Gatto (1915) together with the recommended current name.

Table 1: (Left) Numbered names of lichens as originally appearing in Sommier and Caruana Gatto (1915) and (right) their current scientific names. **D**: dubious record. **Es**: a species that in the original checklist was considered known only (endemic) for the Maltese Islands. **Ev**: a variety that was considered known only for the Maltese Islands. ~~**Es**~~, ~~**Ev**~~: original "endemic" nature ruled out. **Lf**: lichenicolous fungus. **nL**: non-lichenised fungus. **?**: indicates uncertainty which is usually but not always clarified in the comments section. **nrf**: no reference to this lichen name could be found.

1.	Placynthium corallinoides (Hoffm.) Krb.		*Placynthium nigrum* (Huds.) Gray	
2.	Placynthium caesium (Duf.) Mass.		*Psorotichia schaereri* (A. Massal.) Arnold	
3.	Psorotichia murorum Mass.		*Psorotichia murorum* A. Massal.	
4.	Psorotichia riparia Arnd.		*Porocyphus rehmicus* (A. Massal) Zahlbr.	
5.	Enchylium Rubbianum Mass.		*Pterygiopsis affinis* (A. Massal.) Henssen	
6.	Collema pulposum Ach.		*Enchylium tenax* (Sw.) Gray	
	var. granulosum (Ach.) Krb.		*Enchylium tenax* (Sw.) Gray	
	var. compactum Ach.		*Enchylium tenax* (Sw.) Gray	
7.	Collema cheileum (Ach.) Nyl.		*Blennothallia crispa* (Huds.) Otálora, P.M. Jørg. & Wedin	(1)
8.	Collema limosum (Ach.) Nyl.		*Enchylium limosum* (Ach.) Otálora, P.M. Jørg. & Wedin	(2)
9.	Collema tenax (Sw.) Ach.		*Enchylium tenax* (Sw.) Gray	
10.	Collema palmatum (non DC) Schaer.		*Enchylium tenax* (Sw.) Gray	(3)
11.	Collema Meliteum Jatta		*Enchylium tenax* (Sw.) Gray	
	var. conglomeratum Jatta	~~Ev~~	*Enchylium tenax* (Sw.) Gray	(4)
12.	Collema granosum Wlf.		*Lathagrium auriforme* (With.) Otálora, P.M. Jørg. & Wedin	
13.	Synechoblastus flaccidus Krb.			
	var. hydrelus (Fw.) Krb.	D	*Collema flaccidum* (Ach.) Ach.?	(5)
14.	Collemodium subplicatile Nyl.		*Scytinium plicatile* (Ach.) Otálora, P.M. Jørg. & Wedin	
15.	Collemodium turgidum (Schaer.) Nyl.		*Scytinium turgidum* (Ach.) Otálora, P.M. Jørg. & Wedin	(6)
16.	Leptogium lacerum (Ach.) Nyl.		*Scytinium lichenoides* (L.) Otálora, P.M. Jørg. & Wedin	
17.	Leptogium Schraderi Nyl.		*Leptogium schraderi* Nyl.	
18.	Leptogium tenuissimum (Dcks.) Krb.		*Scytinium tenuissimum* (Hoffm.) Otálora, P.M. Jørg. & Wedin	
19.	Leptogium subtile (Sm.) Nyl.		*Scytinium subtile* (Schrad.) Otálora, P.M. Jørg. & Wedin	(7)
20.	Ramalina Duriaei (De Not.) Bagl.		*Ramalina lacera* (With.) J.R. Laundon	
21.	Xanthoria parietina (L.) Th.		*Xanthoria parietina* (L.) Th. Fr.	
	var. aureola (Ach.) Fr.		*Xanthoria aureola* (Ach.) Erichsen	
	var. livida De Not.		*Xanthoria parietina* (L.) Th. Fr.	
	var. subgranulosa Nyl.		*Xanthoria parietina* (L.) Th. Fr.	
	var. ectanea Ach.		*Xanthoria calcicola* Oxner	
22.	Physcia tenella (Sc.) Nyl.		*Physcia tenella* (Scop.) DC.	
23.	Physcia obscura Fr.		*Phaeophyscia orbicularis* (Neck.) Moberg	
	var. virella (Ach.) Th.		*Phaeophyscia orbicularis* (Neck.) Moberg	
24.	Lecanora crassa (Hds.) Ach.		*Squamarina cartilaginea* (With.) P. James var. *cartilaginea*	
	var. caespitosa (Vill.) Schaer.		*Squamarina cartilaginea* (With.) P. James var. *cartilaginea*	
25.	Lecanora gypsacea (Sm.) Ach.		*Squamarina gypsacea* (Sm.) Poelt	
26.	Lecanora lentigera (Web.) Ach.		*Squamarina lentigera* (Weber) Poelt	
27.	Lecanora sublentigera Jatta	~~Es~~	*Squamarina concrescens* (Müll. Arg.) Poelt	(8)
28.	Lecanora saxicola (Poll.)		*Protoparmeliopsis muralis* (Schreb.) M. Choisy s.lat.	
29.	Lecanora fulgens (Sm.) Ach.		*Gyalolechia fulgens* (Sw.) Søchting, Frödén & Arup	(9)
30.	Lecanora pruinifera Nyl.		*Myriolecis pruinosa* (Chaub.) Sliwa, Zhao Xin & Lumbsch	
31.	Lecanora circinata (Pers.) Ach.		*Lobothallia radiosa* (Hoffm.) Hafellner	
32.	Lecanora galactina Ach.		*Myriolecis albescens* (Hoffm.) Sliwa, Zhao Xin & Lumbsch	
	var. muralis Mass.		*Myriolecis albescens* (Hoffm.) Sliwa, Zhao Xin & Lumbsch	
33.	Lecanora subfusca Ach.			
	var. allophana Ach.		*Lecanora allophana* (Ach.) Nyl. var. *allophana*	
	var. chlarona Ach.		*Lecanora chlarotera* Nyl.	

	var. argentata Ach.			
	forma glabrata Schaer.		*Lecanora argentata* (Ach.) Malme? or *L. glabrata* (Ach.) Nyl.?	
	f. boeomycioides Mass.		nrf	
34.	Lecanora Hageni Ach.		*Myriolecis hagenii* (Ach.) Sliwa, Zhao Xin & Lumbsch	
	var. coerulescens (Schaer) Jatta		*Myriolecis hagenii* (Ach.) Sliwa, Zhao Xin & Lumbsch	
35.	Lecanora sulphurea (Hffm.) Ach.		*Lecanora sulphurea* (Hffm.) Ach.	
36.	Lecanora calcarea (L) Snarf		*Circinaria calcarea* (L.) A. Nordin, Savić & Tibell	
	var. concreta Schaer.			
	f. farinosa (Flk.) Schaer		*Circinaria calcarea* (L.) A. Nordin, Savić & Tibell	(10)
	var. contorta (Flk.) Jatta			
	f. cinereo-virens Mass.		*Circinaria calcarea* (L.) A. Nordin, Savić & Tibell subsp. *contorta*	(10)
	var. viridescens (Mass.) Krb.		nrf	
37.	Lecanora lithofraga (Mass.) Jatta	D	*Hymenelia prevostii* (Duby) Kremp. ?	(11)
38.	Lecanora hiascens (Mass.) Jatta		*Hymenelia coerulea* A. Massal.	
39.	Acaraspora glaucocarpa (Wahl.) Krb.		*Acaraspora glaucocarpa* (Ach.) Körb.	
40.	Caloplaca aurea (Schaer.) Jatta	D	?	(12)
41.	Caloplaca murorum (Hffm.) Th.		*Variospora flavescens* (Huds.) Arup, Frödén & Søchting	(13)
42.	Caloplaca pusilla Mass.			
	var. umbratica Jatta		*Calogaya pusilla* (A. Massal.) Arup, Frödén & Søchting	(14)
43.	Caloplaca callopisma (Ach.) Th.		*Variospora aurantia* (Pers.) Arup, Frödén & Søchting	
	var. centroleuca Mass.		*Variospora flavescens* (Huds.) Arup, Frödén & Søchting	
44.	Caloplaca luteo-alba (Turn). Th.		*Cerothallia luteoalba* (Turner) Arup, Frödén & Søchting	(15)
45.	Caloplaca ochracea (Schaer) Mass.		*Xanthocarpia ochracea* (Schaer.) A. Massal. & De Not.	
46.	Caloplaca erythrocarpa (Pers.) Th.		*Caloplaca erythrocarpa* (Pers.) Zwackh	
47.	Caloplaca Melitensis Jatta	Es	*Caloplaca melitensis* Jatta ?	(16)
48.	Caloplaca aurantiaca (Lgthf.) Th.		*Blastenia ferruginea* (Huds.) A. Massal.	
	var. Velana Mass.		*Variospora velana* (A. Massal.) Arup, Søchting & Frödén	
	var. diffracta Mass.		nrf	
	var. leucotis Mass.		*Variospora velana* (A. Massal.) Arup, Søchting & Frödén	
	var. placidia Mass.		*Variospora velana* (A. Massal.) Arup, Søchting & Frödén	
	var. Oasis Mass.		*Flavoplaca oasis* (A. Massal.) Arup, Frödén & Søchting s.str.	
	var. erythrella (Ach) Jatta		*Gyalolechia flavovirescens* (Wulfen) Søchting, Frödén & Arup	
49.	Caloplaca cerina (Ehrh) Th.			
	var. cyanolepra Krb.		*Caloplaca cerina* (Hedw.) Th. Fr. s.lat.	
50.	Caloplaca pyracea (Ach) Th.		*Athallia holocarpa* (Hoffm.) Arup, Frödén & Søchting	
	var. confluens Mass.		*Athallia holocarpa* (Hoffm.) Arup, Frödén & Søchting	
	var. lactea Mass. forma macrocarpa	~~Ev~~	*Xanthocarpia* lactea (A. Massal.) A. Massal.	(17)
	var. pyrithroma (Ach.) Ny1.		*Athallia holocarpa* (Hoffm.) Arup, Frödén & Søchting	
51.	Caloplaca marmorata Bagl.		*Caloplaca subochracea* auct.	
	var. cephaloidea Jatta		?	(18)
52.	Caloplaca fulva (Anzi)		*Pyrenodesmia variabilis* (Pers.) A. Massal.	(19)
53.	Diphratora Cesati Mass.		*Solenopsora cesatii* (A. Massal.) Zahlbr.	
	var. grisea Bagl.		*Solenopsora cesatii* (A. Massal.) Zahlbr.	
	var. olivacea Bagl		*Solenopsora cesatii* (A. Massal.) Zahlbr.	
54.	Diphratora spadicea (Fw.) Jatta			
	var. Gennari Bagl		*Lecania spadicea* (Flot.) Zahlbr.	
55.	Diphratora olivacea Duf.		*Solenopsora olivacea* (Fr.) H. Kilias subsp. *olivacea*	
56.	Lecaniella pseudocyrtella Anzi		*Lecania cyrtella* (Ach.) Th. Fr.	
	var. Melitensis	~~Ev~~	?	(20)
57.	Lecaniella Turicensis Mass.		*Lecania turicensis* (Hepp) Müll. Arg.	
58.	Lecaniella proteiformis Mass.		*Lecania turicensis* (Hepp) Müll. Arg.	
	var. lecideina Mass.		*Lecania turicensis* (Hepp) Müll. Arg.	
	var. compacta Mass.		*Lecania inundata* (Körb.) M. Mayrhofer	(21)
59.	Lecaniella alocyza Mass.		*Pyrenodesmia alociza* (A. Massal.) Arnold	
	var. flavidula	~~Ev~~	*P. alociza* (A. Massal.) Arnold ?	(22)
60.	Lecaniella dimorpha Mass.		*Catillaria dimorpha* A. Massal.	
61.	Lecaniella polycycla Anzi.		*Lecania polycycla* (Anzi.) Lettau	
62.	Lecania athroocarpa Dub.		*Lecania fuscella* (Schaer.) A. Massal.	(23)
63.	Lecania Koerberiana (Lhm) Krb.		*Lecania koerberiana* J. Lahm	
64.	Haematomma cismonicum Beltr.	D	*Loxospora cismonica* (Beltr.) Hafellner	(24)
65.	Rinodina metabolica (Ach.) Krb.			
	var. Maculiformis		*Rinodina exigua* (Ach.) Gray	
66.	Rinodina albana Mass.		*Rinodina albana* (A. Massal.) A. Massal.	
67.	Pertusaria dealbata Ach.		nrf	(25)
68.	Pertusaria communis DC.		*Pertusaria pertusa* (L.) Tuck. var. *pertusa*	
69.	Pertusaria lejoplaca Ach.		*Pertusaria leioplaca* (Ach.) DC.	
70.	Pertusaria leucostoma Mass.		*Pertusaria leioplaca* (Ach.) DC.	

71.	Urceolaria scruposa Ach.		D	*Diploschistes scruposus* (Schreb.) Norman	(26)
	var. gypsacea Smrf.			*Diploschistes gypsaceus* (Ach.) Zahlbr	
	var. bryophila Schaer.			*Diploschistes scruposus* (Schreb.) Norman	(26)
72.	Urceolaria actinostoma Pers.			*Diploschistes candidissimus* (Ach.) Zahlbr	
	var. tectorum Mass.			*Diploschistes candidissimus* (Kremp.) Zahlbr.	
73.	Cladonia pungens Flk.			*Cladonia rangiformis* Hoffm.	
74.	Cladonia muricata Del.			*Cladonia rangiformis* Hoffm.	
75.	Cladonia pyxidata (L) Fr.			*Cladonia pyxidata* (L) Hoffm.	
	var. neglecta (Flk.) Krb.			*Cladonia pyxidata* (L) Hoffm.	(27)
	var. pocillum (Ach.) Flk.			*Cladonia pocillum* (Ach.) Grognot	
76.	Cladonia fimbriata (L.) Fr.			*Cladonia fimbriata* (L.) Fr.	
77.	Cladonia endiviaefolia (Dcks.) Fr.			*Cladonia foliacea f. convoluta* (Lam.)	
78.	Biatora decipiens (Ach.) Fr.			*Psora decipiens* (Hedw.) Hoffm.	
	var. dealbata Mass.			*Psora decipiens* (Hedw.) Hoffm.	
79.	Biatora coroniformis Krplh.		D	*Psora crenata* (Th. Tayl.) Reinke	(28)
80.	Biatora fusco-nigrescens Jatta		Es	nrf	(29)
81.	Biatora chondrodes Mass.			*Clauzadea chondrodes* (A. Massal) Hafellner & Türk	
82.	Biatora cyclisca Mass.			*Clauzadea chondrodes* (A. Massal) Hafellner & Türk	
83.	Biatorina sylvestris Arnd.			*Lecania sylvestris* var. *umbratica* (Arnold) M. Mayrhofer	
84.	Biatorina lenticularis (Ach.) Krb.			*Catillaria lenticularis* (Ach.) Th. Fr.	
	var. ecrustacea (Krb.) Arnd.			*Catillaria lenticularis* (Ach.) Th. Fr.	
85.	Bacidia atrogrisea (Hepp.) Krb.			*Bacidia laurocerasi* (Duby) Zahlbr.	
86.	Bacidia rosella (Pers.) De Not.			*Bacidia rosella* (Pers.) de Not.	
87.	Lecidea auriculata Th. var calcicola Jatta		~~Ev~~	?	(30)
88.	Lecidea viridans Fw.			*Lecidella viridans* (Flot.) Körb.	
89.	Lecidea enteroleuca Ach.			*Lecidella elaeochroma* (Ach.) M Choisy var. *elaeochroma* f. *elaeochroma*	
90.	Lecidea olivacea Mass.			*Lecidella elaeochroma* (Ach.) M Choisy var. *elaeochroma* f. *elaeochroma*	
91.	Lecidea glabra Krplh. var. viridula Arnd.			*Lecidella stigmatea* (Ach.) Hertel & Leuckert ?	(31)
92.	Lecidea pertusariicola Jatta	Lf	~~Es~~	*Skyttea heterochroae* Nav.- Ros. & Muniz	(32)
93.	Thalloedema tabacinum (DC.) Mass.			*Toninia tristis* (Th. Fr.) Th. Fr. subsp. *Tristis*	
94.	Thalloedema paradoxum Jatta		Es	*Toninia paradoxa* (Jatta) Zahlbr.	(33)
95.	Thalloedema vesiculare (Hffm.) Mass.			*Toninia sedifolia* (Scop.) Timdal	
	var. teretocarpum Mass.			*Toninia sedifolia* (Scop.) Timdal	(34)
96.	Thalloedema mammillare (Fr) Mass.				
	var. pulchellum		~~Ev~~	*Porpidinia tumidula* (Sm.) Timdal	(35)
97.	Toninia acervulata Ny1.			*Toninia aromatica* (Sm.) A. Massal.	
98.	Toninia aromatica (Sm.) Mass.			*Toninia aromatica* (Sm.) A. Massal.	
99.	Toninia squalida (Ach.) Mass.			*Toninia squalida* (Ach.) A. Massal.	
100.	Arthrosporum accline Krb.			*Arthrosporum populorum* A. Massal.	
101.	Scoliciosporum Doriae Bagl.			*Bactrospora patellarioides* var. *convexa* (B. de Lesd.) Egea & Torr.	
	var. decussatum		~~Ev~~	*B. patellarioides* (B. de Lesd.) Egea & Torr variety ?	(36)
102.	Buellia canescens (Dcks.) De Not.			*Diploicia canescens* (Dicks.) A. Massal.	
103.	Buellia parasema (Ach.) Krb.				
	var. rugulosa (Ach.) Krb.			*Buellia disciformis* (Fr.) Mudd	
104.	Buellia punctata (Flk.) Krb.			*Amandinea punctata* (Hoffm.) Coppins & Scheid.	
105.	Diplotomma albo-atrum (Hffm.) Krb.			*Diplotomma alboatrum* (Hoffm.) Flot.	
	var. epilobium (Ach.) Schaer.			*Diplotomma alboatrum* (Hoffm.) Flot.	
	var. venustum Krb.			*Diplotomma venustum* (Körb) Körb.	
	var. corticola Schaer.			*Diplotomma alboatrum* (Hoffm.) Flot.	
106.	Roccella tinctoria DC.		D	*Roccella tinctoria* DC. ?	(37)
107.	Roccella phycopsis Ach.			*Roccella phycopsis* Ach.	
108.	Lecanactis lyncea (Sm.) Eschw.			*Lecanactis lyncea* (Sm.) Egea & Torrente	
109.	Lecanactis Dilleniana (Ach.) Krb.		D	*Psoronactis dilleniana* (Ach.) Ertz & Tehler	(38)
110.	Lecanactis granulosa (Duf.) Fr.			*Paralecanographa grumulosa* (Dufour) Ertz & Tehler	
111.	Graphis dendritica Ach.				
	var. medusula Nyl.			*Arthonia medusula* (Pers.) Nyl.	
112.	Graphis scripta (L) Ach.				
	var. recta (Hmb.) Krb.			*Graphis scripta* (L.) Ach.	
	var. serpentina (Ach.) Schaer.			*Graphis scripta* (L.) Ach.	
113.	Graphina sophistica Nyl.				
	var. Melitensis	D	~~Ev~~	*Graphis inustuloides* Lücking ?	(39)
114.	Opegrapha Duriaei Mtg. et Brck.			*Opegrapha durieui* Mont.	
115.	Opegrapha celtidicola Jatta			*Opegrapha celtidicola* (Jatta) Jatta	
116.	Opegrapha varia Pers.			*Alyxoria varia* (Pers.) Ertz & Tehler	
	var. notha (Ach.) Jatta			*Alyxoria varia* (Pers.) Ertz & Tehler	

var. rimalis (Pers.) Ach.		*Alyxoria varia* (Pers.) Ertz & Tehler	
var. violatra (Mass.) Jatta		*Alyxoria varia* (Pers.) Ertz & Tehler	
117. Opegrapha rupestris Fr.		*Opegrapha rupestris* Pers.	
var. dolomitica Arnd.		*Opegrapha dolomitica* (Arnold) Torrente & Egea	
118. Opegrapha herpetica Ach.		*Pseudoschismatomma rufescens* (Pers.) Ertz & Tehler	
var. fuscata Schaer.		*Pseudoschismatomma rufescens* (Pers.) Ertz & Tehler	
119. Opegrapha rubecula Mass.		*Pseudoschismatomma rufescens* (Pers.) Ertz & Tehler	
120. Opegrapha lilacina Mass.		*Pseudoschismatomma rufescens* (Pers.) Ertz & Tehler	
121. Opegrapha atra (Pers.) Fr.		*Arthonia atra* (Pers.) A. Schneid.	
122. Opegrapha lithyrga (Ach.) Krb.	D	*Opegrapha lithyrga* Ach.	(40)
123. Opegrapha siderella Ach.		*Pseudoschismatomma rufescens* (Pers.) Ertz & Tehler	
124. Opegrapha saxatilis DC.		*Opegrapha rupestris* Pers.	
125. Opegrapha Mougeothii Mass.		*Alyxoria mougeotii* (A. Massal.) Ertz, Frisch & G.Thor	
var. Pisana Bagl.		*Alyxoria mougeotii* (A. Massal.) Ertz, Frisch & G.Thor	
126. Arthonia caesio-pruinosa Schaer.	D	*Arthonia cinereopruinosa* Schaer.	(41)
127. Arthonia galactites (DC.) Nyl.		*Arthonia galactites* (DC.) Dufour	
128. Arthonia apotheciorum (Mass.) Almg.	Lf	*Arthonia clemens* (Tul.) Th. Fr.	(42)
129. Arthonia dispersa (Schrad.) Mass.		*Arthonia dispersa* (Schrad.) Nyl.	
130. Arthonia aspersa Lgth.	D	*Arthonia arthonioides* (Ach.) A.L.Sm. ?	(43)
131. Arthonia coniangioides Bagl.		*Arthonia melanophtalma* Nyl.	
132. Arthonia punctiformis Ach.		*Arthonia punctiformis* Ach	
133. Arthonia epipastoides Nyl.	nL	*Arthonia radiata* (Pers.) Ach.	
var. galactitella Nyl.		*Arthonia glaucella* Nyl.	(44)
134. Arthonia mediella Nyl.	D	*Arthonia mediella* Nyl. ?	(45)
135. Arthonia ectropoma Mass.		*Arthonia dispersa* (Schrad.) Nyl.	
136. Arthonia didyma Krb.	D	*Arthonia didyma* Krb. ?	(46)
137. Arthothelium Ruanum Mass.		*Arthonia ruana* A. Massal.	
138. Arthothelium Beltraminianum Mass.		*Arthonia ruana* A. Massal.	
139. Dirina Ceratoniae (Ach.) De Not.		*Dirina ceratoniae* (Ach.) Fr.	
140. Dirina repanda (Fr.) Nyl.		*Dirina massiliensis* Durieu & Mont.	
141. Endopyrenium rufescens (Ach.) Krb.		*Placidium rufescens* (Ach.) A. Massal.	
142. Endopyrenium hepaticum (Ach.) Krb.		*Clavascidium lacinulatum* (Ach.) M. Prieto	
143. Endopyrenium dedalaeum (Krplh) Krb.	D	*Catapyrenium cinereum* (Pers.) Körb.	(47)
144. Endopyrenium Adriaticum Zahlbr.	D	*Hydropunctaria adriatica* (Zahlbr.) Orange	(48)
145. Catapyrenium Custnani Mass.		*Placidiopsis custnani* (A. Massal.) Körb.	
146. Catapyrenium circinatum Bagl.		*Placidiopsis cinerascens* (Nyl.) Breuss	
147. Dermatocarpon glomeruliferum Mass.		*Endocarpon pusillum* Hedwig	
148. Verrucaria lecideoides Hepp.		*Verruculopsis lecideoides* (A. Massal.) Gueidan & Cl. Roux var. *lecideoides*	
var. minuta Mass.		*Verruculopsis minuta* (Hepp) Krzew.	
149. Verrucaria hydrela Ach.	D	*Verrucaria hydrela* Ach.	(49)
150. Verrucaria ruderum DC.		*Verrucaria ruderum* DC.	
151. Verrucaria papillosa Ach.		*Verrucaria papillosa* Ach.	
152. Verrucaria rupestris Schrad.		*Verrucaria rupestris* Schrad.	
var. calciseda Schaer.		*Bagliettoa calciseda* (DC.) Gueidan & Cl. Roux	
var. crassa Mass.		nrf	
var caesia Arnd.		nrf	
var. orbicularis Garov.		nrf	
153. Verrucaria purpurascens Hffm.		*Bagliettoa marmorea* (Scop.) Gueidan & Cl. Roux	
154. Verrucaria muralis (Ach.) Mass.		*Verrucaria muralis* (Ach.)	
155. Verrucaria anceps Krplh	D	*Verrucaria anceps* Kremp.	(50)
156. Verrucaria myriocarpa Hepp.	D	*Verrucaria murina* Leight.	(51)
157. Verrucaria Baldensis Mass.			
var. spilomatica Mass.		*Bagliettoa baldensis* (A. Massal.) Vězda	
158. Verrucaria Veronensis Mass.		*Verrucaria veronensis* A. Massal.	
159. Verrucaria dolomitica Mass.		*Verrucaria dolomitica* (A. Massal.) Kremp.	
160. Verrucaria foveolata (Flk.) Mass.		*Verrucaria foveolata* (Flörke) A. Massal.	
161. Verrucaria macrostoma (Duf.) DC.		*Verrucaria macrostoma* DC. f. *macrostoma*	
162. Verrucaria tabacina Mass.		*Verrucaria tabacina* (A. Massal.) Trevis.	
163. Verrucaria acrotelloides Mass.		*Verrucaria nigrescens* Pers. f. *nigrescens*	
164. Verrucaria apathela (Mass) Jatta		*Verrucaria apatela* (A. Massal.) Trevis.	
165. Verrucaria fuscoatra (Wallr.) Krb.		*Verrucaria nigrescens* Pers. f. *nigrescens*	
var. controversa Mass.		*Verrucaria nigrescens* Pers. f. *nigrescens*	
var. collematodes Garov.		*Verrucaria collematodes* Garov.	
166. Verrucaria viridula Ach.		*Verrucaria viridula* (Schrad.) Ach	
167. Verrucaria Beltraminiana Mass.		*Verrucaria beltraminiana* (A. Massal.) Trevis	
168. Verrucaria fuscella Turn.		*Placopyrenium fuscellum* (Turner) Gueidan & Cl. Roux	
var. cinereo-glauca Garov.		nrf	

169.	Verrucaria glaucina (Ach.) Hepp.		D	*Verrucaria caerulea* DC. or *Placopyrenium fuscellum* (Turner) Gueidan & Cl. Roux ?	(52)
170.	Verrucaria tristis Krypt. var. depauperata Mass.		D	*Parabagliettoa disjuncta* (Arnold) Krzewicka	(53)
171.	Thelidium galbanum (Krplh.) Krb. var. acrustaceum Arnd.			*Thelidium pyrenophorum* (Ach.) A. Massal.	(54)
172.	Thelidium crassum Mass.		D	*Thelidium decipiens* (Nyl.) Kremp. ?	(55)
173.	Thelidium minutulum Krb.		D	*Thelidium minutulum* Krb. ?	(56)
174.	Thelidium epipolaeum (Ach.) Krb.			*Verrucaria rupestris* Schrad. ?	(57)
175.	Polyblastia clandestina Arnd.		D	*Polyblastia clandestina* (Arnold) Jatta ?	(58)
176.	Acrocordia conoidea Krb. var. dimorpha Krb.			*Acrocordia conoidea* Krb.	
177.	Arthopyrenia analepta Ach.	D	nL	*Naetrocymbe punctiformis* (Pers.) R.C. Harris	(59)
178.	Arthopyrenia cinereo-pruinosa Schaer.		nL	*Arthropyrenia cinereopruinosa* (Schaerer) Massal.	(60)
179.	Arthopyrenia punctiformis Fr.		nL	*Naetrocymbe punctiformis* (Pers.) R.C. Harris	(59)
180.	Sagedia oleriana Mass.			*Porina oleriana* (Massal.) Lettau	
181.	Pyrenula nitida (Schrad.) Ach. var. nitidella (Flk.) Schaer.		D	*Pyrenula nitidella* (Schaer.) Mull. Arg. ?	(61)
182.	Cyrtidula crataegina Mnks.		nL	*Cyrtidula* sp. ?	(62)
183.	Cyrtidula occulta Mnks.		nL	*Cyrtidula* sp. ?	(62)

Table 2: Notes.

01	*Blennothallia crispa* (Huds.) Otálora, P.M. Jørg. & Wedin is the current name for *Collema cheileum* (Ach.) Ach. (Nimis, 2016).
02	*Enchylium limosum* (Ach.) Otálora, P.M. Jørg. & Wedin is the current name for *Collema limosum* (Ach.) Ach. (Nimis, 2016).
03	According to Carvalho (2012), *Collema palmatum* Ach. is a synonym of *Collema tenax* (Sw.) Ach. *Enchylium tenax* (Sw.) Gray is the current name for *Collema tenax* (Sw.) Ach.
04	In Sommier and Caruana Gatto (1915), the type is quoted as being present in Sardegna and Malta while the var. *conglomeratum* is quoted as being known from Malta only. These are both synonyms of *Collema tenax* (Sw.) Ach currently *Enchylium tenax* (Sw.) Gray.
05	In Jatta (1909-11), *Lethagrium rupestre* (Swartz.) Massal is given as a synonym of *Synechoblastus flaccidus* Krb. while in Nimis (1993) the current name *Collema flaccidum* (Ach.) Ach. is given for *Lethagrium rupestre* (Swartz.) Massal. In Nimis (2016), *C. flaccidum* is described as a boreal-montane lichen. This casts doubt on the correct identification of this lichen. Jatta (1909-11) also includes and describes the var. *hydrelus* (Fw.) Krb. but does not report it from Malta. No current name for this variety could be traced.
06	*Scytinium turgidum* (Ach.) Otálora, P.M. Jørg. & Wedin was found as the current name of *Collemodium turgidum* (Ach.) Nyl.
07	*Scytinium subtile* (Schrad.) Otálora, P.M. Jørg. & Wedi was found as the current name of *Leptogium subtile* (Schrad.) Torss.
08	*Lecanora sublentigera* Jatta is currently known as *Squamarina concrescens*. This lichen is not restricted to the Maltese Islands.
09	*Lecanora fulgens* (Sm.) Ach. should read *Lecanora fulgens* (Sw.) Ach. The current name proposed here has recently replaced that of *Fulgensia fulgens* (Sw.) Elenkin.
10	The current names being suggested here do not refer to f. *farinosa* and to f. *contorta* but to their respective varieties only. No reference to *Lecanora calcarea* var. *viridescens* could be traced.
11	This saxicolous lichen of hard stone is frequent in the Alps but is also found in the Mediterranean mountains (Nimis, 2016). The record from Malta is dubious.
12	Jatta (1909-11) and several authors had a wrong concept of *Caloplaca aurea* (Schaer.) which is more of an upland region lichen (Nimis, 1993). Records of *C. aurea* by various authors probably refer to a *Fulgensia* species (Nimis, 1993).
13	*Caloplaca flavescens* (currently *Variospora flavescens*) was frequently called *Caloplaca murorum* by early Italian authors. The name *C. murorum* was also used albeit less frequently for *Caloplaca aurantia* (currently *Variospora aurantia*) (Nimis, 1993).
14	The current name being suggested does not refer to the var. *umbriatica* to which no reference was found.

15 In Sommier and Caruana Gatto (1915), *Caloplaca luteo alba* was quoted as found growing on rocks, stone and bark. *Cerothallia luteoalba* grows on bark in temperate regions. The name "luteoalba" was frequently used by early Italian authors, including Jatta, to refer to taxa of the *C. pyracea-holocarpa* complex. Old records collected on rock could refer to *Xanthocarpia* [*Caloplaca*] *lactea* and related species (Nimis, 1993). Several old corticolous records reported in Nimis (1993) might actually be *Athallia pyracea* (Nimis, 2016).

16 The identification of this lichen needs clarification.

17 According to Sommier and Caruana Gatto (1915) var. *lactea* f. *macrocarpa* was found on rocks in Gozo only. (Jatta, 1909-11) reports f. *macrocarpa* from the island of Malta but does not refer to it as being known only from Malta (or Gozo).

18 *C. marmorata* var. *cephaloidea* was collected by Sommier & Caruano Gatto from Girgenti (Malta). Though Jatta had suggested the name *cephaloidea* for this variety he never published this record (Sommier & Caruana Gatto, 1915).

19 If the specimen sent to Jatta was correctly identified it is surprising that the authors report that this lichen was found at Fort Manoel only (Sommier & Caruana Gatto, 1915). *Pyrenodesmia variabilis* [*Caloplaca variabilis*] is more widespread in the Maltese Islands.

20 Sommier and Caruana Gatto (1915) report that they had found a different form of *Lecania pseudocyrtella* growing on pine trees at Buskett. Jatta had suggested calling this variety *Melitensis*. However, he never wrote any description for this variety and there is no mention of it in Flora Cryptogama Italica (Jatta, 1909-11).

21 In the past *Lecania inundata* was often confused with *L. erysibe* and *L. turiciensis* (Nimis, 2016).

22 Sommier and Caruana Gatto (1915) report that the variety *flavidula* was known from Malta only. Jatta (1909-11) mentions it as a variety found on coastal cliffs in Malta. He gives a description but does not say it is endemic. *Pyrenodesmia alociza* [*Caloplaca alociza*; *Lecaniella alociza*] is one of the black-fruited "*Caloplacas*" and can be rather variable from a morphological point of view (Muggia, Grube & Tretiach, 2007).

23 Jatta (1909-11) includes *Lecania fuscella* as a synonym of *Lecania athroocarpa* Dub.

24 *Haemotomma cismonicum* Beltr. is the basionym of *Loxospora cismonica* (Beltr.) Hafellner. This epiphytic lichen of old forests is mostly found in the montane belt. Here it is reported as having been found only once growing on *Datura* in a garden in Mosta. This identification is rather dubious.

25 No valid current name for *P. dealbata* Ach. could be found.

26 *Diploschistes scruposus* grows on siliceous rocks and rarely on soil (Nimis, 2016). The authors (Sommier & Caruana Gatto, 1915) quote that the lichen was found growing on *Cladonia* and other lichens. According to Nimis (1993), old records of *D. scruposus* should be viewed with caution as they might refer to *D. muscorum*. All this sheds doubt on the correct identification of this lichen.

27 *Cladonia pyxidata* is the current name for both *Cladonia neglecta* (Flörke) Spreng. and *Cladonia pyxidata* var. *neglecta* (Flörke) A. Massal.

28 The records of *Psora crenata* [*Biatora coroniformis*] from Sardegna and Sicily by Jatta (1909-11) most probably refer to *Psora decipiens* (Nimis, 2016). In his addenda section Jatta (1909-11) mentions *B. coroniformis* as having also been found in Malta.

29 Jatta (1909-11) reports *B. fusco-nigrescens* a new species known from trees in Malta but does not write "known only from Malta". Sommier and Caruana Gatto (1915) specify that it was found on carob trees at Wied Babu and add that the species was known only from Malta. No further information could be found about this species.

30 *Lecidea auriculata* subsp. *auriculata* Th. Fr. is found on siliceous rocks in wind-exposed, sunny situations, in the high-Alpine belt of humid mountains (Nimis, 2016). A high percentage of the older herbarium specimens are misidentified (Hertel, 2001). According to Nimis (1993), the var. *calcicola* described by Jatta (1909-11) from Malta is probably not related to this species.

31 The current name *Lecidella stigmatea* applies to *Lecidea glabra* and not to *L. glabra* var. *viridula*.

32 *Lecidea pertusariicola* is not a lichen but a lichenicolous fungus (a fungus growing on lichens). Jatta (1909-11) quotes this "lichen" from Malta as having been found growing on *Pertusaria communis* while in Sommier and Caruana Gatto (1915) it is quoted as growing on *Pertusaria*, carobs, fig trees and on *Crataegus*. The type material of *L. pertusariicola* Jatta is housed at the Jatta herbarium in Naples. Navarro-Rosinés and Muñiz (2009) examined the host of *L. pertusariicola* in the type specimen from Malta and found it to be *Pertusaria heterochroa* rather than *P. communis* as had been reported in Jatta (1909-11). A new name *Skyttea heterochroae* was proposed for this lichenicolous fungus (Navarro-Rosinés & Muñiz, 2009) to include *Lecidea pertusariicola* Jatta in the genus *Skyttea*, in order to avoid the homonymy with *Skyttea pertusariicola* Diederich et Etayo. *S. heterochroae* is a non-lichenized lichenicolous fungus that grows specifically on *Pertusaria heterochroa*, and it is only known from a few European Mediterranean localities which are Catalonia, Ibiza, Majorca and Malta (Navarro-Rosinés & Muñiz, 2009).

33 Sommier and Caruana Gatto (1915) treat this as an endemic terricolous lichen while Jatta (1909-11) does not refer to it as being endemic to Malta but only that it is was found on soil in Malta.

34 *Toninia sedifolia* [*T. vesiculare*] is morphologically very variable. Preliminary investigations using morphology, chemistry and DNA sequence data show that *T. sedifolia* needs to be revised (Westberg, Fernandez-Brime, Timdal, Williams & Wedin, 2016). The variety teretocarpum being mentioned here (Sommier & Caruana Gatto, 1915) may reflect the findings of Westberg et al. (2016).

35 *Thalloedema mammillare* (Fr.) Mass. (but not the variety *pulchellum*) is reported as a saxicolous calciferous lichen from Italy and Malta by Jatta (1909-11). This species is not reported in Sommier and Caruana Gatto (1915). Instead they report the terricolous variety *pulchellum* known from Malta only. Up to some years ago *Thalloedema mammillare* (Fr.) Mass. was *Toninia timudula* (Sm.) Zahlbr. Timdal (2010) described a new genus *Porpidinia* for *Toninia timudula* due to differences in the microscopical sections of the hymenium. The lichen is currently *Porpidinia tumidula* (Sm.) Timdal.

36 *Bactrospora patellarioides* is the only *Bactrospora* species to be found in the Mediterranean (Egea & Torrente, 1993). *B. patellarioides* var. *convexa* is known from all over Italy. One can tentatively suggest that the specimens of *Scolicosporum doriae* collected from the bark of different trees and mentioned in Sommier and Caruana Gatto (1915) represent this variety. Could the variety decussatum in Sommier and Caruana Gatto (1915) – described as known only from Malta – be referring to *Bactrospora patellarioides* (Nyl.) Almq. var. *patellarioides*? This variety has been collected in different parts of Italy though.

37 The existence of *R. tinctoria* in the Mediterranean region is dubious. Old Italian authors used this name for *Roccella phycopsis* (Nimis, 1993). All specimens labelled as *R. tinctoria* present in the herbaria of ARG and NMNH and were examined by this author and all were found to be *R. phycopsis* (Fiorentino, 2015).

38 This lichen grows on siliceous rocks of upland regions. Records from the South of Italy are dubious (Nimis, 1993). This species is not expected to be found growing on rocks in Malta as reported.

39 Sommier and Caruana Gatto (1915) report that the specimen from Malta, found growing on the bark of fig trees at Balluta, was considered a local variety of the species and was given the name var. *Melitensis*. A short description of its spores is included. However in Flora Italica Cryptogama (Jatta, 1909-11) there is no mention of var. *melitensis*. Instead only *Graphina sophistica* from Malta is mentioned. The description and spore size given in Jatta (1909-11) does not exclude the "variety" from Malta. In Europe *G. inustuloides* [*G. sophistica*] has an Atlantic distribution. There are only two dubious records of this lichen from Italy (Nimis, 1993). This sheds doubt on the presence of this lichen in Malta.

40 *O. lithyrga* is usually found on hard siliceous rocks in deep gorges or in mature forests (Nimis, 2016). Jatta (1909-11) reports it growing on siliceous, calcareous and volcanic rock. Sommier and Caruana Gatto (1915) found the lichen on stones of walls and on rocks (calcareous substrates). The habitat preferred by this species (Nimis, 2016) makes its presence in Malta unlikely.

41 This corticolous lichen occurs in shaded, humid situations especially dense woodlands. According to Nimis (1993), the records by Jatta from Southern Italy appear dubious thus making its presence on cypress trees at the Addolorata cemetery equally dubious.

42 *Arthonia clemens* is a lichenicolous fungus (a fungus which parasitises lichens) and not a lichen. It grows only on the apothecia of the lichen *Rhizoplaca chrysoleuca* a mountain lichen of siliceous rocks (Nimis, 2016). In Sommier and Caruana Gatto (1915), *A. clemens* is reported to have been found on the saxicolous lichen *Lecanora galactina* (currently *Myriolecis albescens*). According to Nimis (2016), references to *Arthonia clemens* on epilithic *Lecanora* species may be referring either to the lichenicolous fungus *A. galactinaria* which grows on lichens of the *Myriolecis dispersa*-group or to *A. apotheciorum* which grows on *Myriolecis albescens*.

43 Nimis (1993) quotes Redinger (1936) who claims that the record of *A. aspersa* Leight. from Malta by Jatta (1900) in *Sylloge Lichenum Italicorum* is most probably *Arthonia melanophthalma* Nyl. *Arthonia arthonioides* [*Arthonia aspersa*] grows on acidic rocks, on exposed roots in dry underhangs as well as on dry undersides of trees in sheltered, humid situations, such as in forests (Nimis, 2016).

44 *A. glaucella* is probably a non-lichenised fungus (Nimis, 2016).

45 *A. mediella* is a cool-temperate to boreal-montane epiphytic lichen (Nimis, 2016). It is not expected from Malta.

46 *A. didyma* is a cool-temperate species found on smooth, acid bark in humid areas. Not likely to be present on olive trees in Malta.

47 *Catapyrenium cinereum* is a lichen of very cold climates and may also be found on mountains near or above treeline. It grows on siliceous, base-rich soil or amongst terricolous bryophytes. Some records from low elevations in Sicily appear dubious (Nimis, 2016). This makes the record from Malta equally dubious.

48 *H. adriatica* is a rather poorly known species of maritime, mostly calcareous rocks in the supralittoral zone (Nimis, 2016). In Sommier and Caruana Gatto (1915), the lichen is quoted as having been found growing on the bastions in Valletta. This makes the record of this lichen rather dubious.

49 *V. hydrela* grows on siliceous pebbles which are periodically submerged by fresh water usually in upland regions. Several records, especially those from southern Italy, need confirmation (Nimis, 2016). The record from Malta – being quoted as found growing on walls – is rather dubious.

50 *Verrucaria anceps* is a saxicolous lichen found on mountains. Its presence on rock, walls and bastions in Malta is therefore dubious.

51 *Verrrucaria murina* is a saxicolus lichen of limestone and dolomite in upland areas. Records of this species from Southern Italy being dubious are not accepted (Nimis, 2016). This doubt can be extended to records from Malta.

52 *Verrucaria caerulea* DC is the current name of *Verrucaria glaucina* Ach. non auct. In Southern Italy, *V. caerulea* is restricted to upland regions when present (Nimis, 2016). Hence the record of its presence on the bastions of Valletta is dubious. Jatta (1909-11) does not include the record from Malta of *Verrucaria glaucina* (Ach.) Hepp. and gives *Verrucaria fuscella* v. *subviridula* Garov. as its synonym. However, according to Nimis (2016), *Verrucaria fuscella* v. *subviridula* Garov. is a synonym of *Placopyrenium fuscellum* (Turner) Gueidan & Cl. Roux which up to recently was known as *Verrucaria fuscella* (Turner) Winch and was the accepted name of *V. glaucina sensu* Zetterst. et auct p.p. non Ach. (Nimis, 2016). According to Nimis (2016), *P. fuscellum* is a polymorphic taxon in need of revision.

53 *Parabagliettoa disjuncta* is a saxicolous lichen typical of mountains. The record from Malta is dubious.

54 In Jatta (1909-11), *Thelidium galbanum* and *T. pyrenophorum* are treated as two separate species and the latter is described as having 3-septate spores. In actual fact *T. pyrenophorum* has 1-septate spores (Smith, 2009). Jatta (1909-11) mentions *T. galbanum* var. *acrustaceum* from Malta citing differences in thallus and spore size between the species and its variety. The collection of lichens at NMNH includes one saxicolous specimen carrying the label *Thelidium galbanum* from Imtahleb as well as a second saxicolous specimen carrying a label with two names *Thelidium pyrenophorum* Krb. and *Thelidium galbanum* Jatta. Both specimens were examined by the present author and both were found to be *T. pyrenophorum*. This lichen is typically a high altitude lichen (Nimis, 2016) and its presence at Imtahleb which is 186 m above sea level is rather unexpected.

55 The current name of *T. crassum* is *Thelidium decipiens*. Jatta (1909-11) reports *T. crassum* as growing on calcareous cliffs in Veneto, Abbruzzo, Puglia and Malta. Nimis (2016) describes it as a species of calcareous rocks, including large pebbles, in rather sheltered situations in upland regions. However, Sommier and Caruana Gatto (1915) report the lichen from maritime rocks in the splash zone. This sheds great doubt on the correct identification of the specimen from Malta.

56	*T. minutulum* is reported as having been found on maritime rock (Sommier & Caruana Gatto, 1915). However, *T. minutulum* is a cold-climate lichen which sometimes occurs in the splash zone of creeks (Nimis, 2016). This throws doubt on the correct identification of this lichen.
57	In Flora Italica Cryptogama (Jatta, 1909-11) a description of *Thelidium epipolaeum* (Ach.) Krb. with 3-septate spores is given without any mention of Malta as provenance. Jatta (1909-11) probably made a mistake in citing Acharius (Ach.) as a basionym. Instead he should have used *Thelidium epipolaeum* A. Massal. When examining the specimen from Gozo (Malta), Jatta might have been probably dealing with *Verrucaria epipolaea* Ach. whose current name is *Verrucaria rupestris* Schrad. (Pier Luigi Nimis, personal communication).
58	*P. clandestina* is found on limestone and dolomite at high altitudes in rather humid situations. The record of Jatta (1909-11) from Malta seems very dubious (Nimis, 1993).
59	*Naetrocymbe punctiformis* (Pers.) R.C. Harris (formerly *Arthropyrenia punctiformis* (Pers.) Massal.) colonises smooth bark in temperate to boreal-mountain regions. It is very rarely found in dry areas. It is probably a non-lichenised fungus (Nimis, 2016).
60	Probably a non-lichenised fungus (Nimis, 2016).
61	This record should be *Pyrenula chlorospila Arnold* (Fiorentino, 2007).
62	The fungal genus *Cyrtidula* is very poorly understood. The thallus of this fungus is saprobic, doubtfully lichenised, mostly immersed in bark which is discoloured in the process (Smith, 2009).

The list of lichens in Sommier and Caruana Gatto (1915) is followed by a footnote in Italian accompanied by a short list of new lichens quoted in Gulia (1858–59). A loose translation of the note from Italian is given below.

"Observation: Pages 213–214 of the Repertorio di Storia Naturale by Gavinio Gulia give a number of local lichens which we have not included in our list as we were not very sure of their correct identification."

Table 3 gives the original names of these lichens together with their current names.

Table 3: Left: names of lichens originally listed by Gulia (1858–59) as quoted in Sommier and Caruana Gatto (1915) and right: current names of lichens.

Collema plicatile	*Scytinium plicatile* (Ach.) Otálora, P.M. Jørg. & Wedin
C. crispum	*Blennothallia crispa* (Huds.) Otálora, P.M. Jørg. & Wedin
Lecanora flavescens	*Lecanora rupicola* subsp. *sulphurata* (Ach.) Leuckert & Poelt
L. subimbricata	*Lobothallia radiosa* (Hoffm.) Hafellner
L. canescens	*Diploicia canescens* (Dicks.) A. Massal
L. crassa	*Squamarina cartilaginea* (With.) P. James var. *cartilaginea*
Scynophorus pyxidatus	*Cladonia pyxidata* (L.) Hoffm.
Endocarpon pandurae-forme species nova	?

4 Conclusion

The list of lichens appearing in Sommier and Caruana Gatto (1915) has reduced to about 150 lichens from the original 183. This is due to a number of reasons. There are instances where a number of different species in Sommier and Caruana Gatto (1915) point to the same lichen species. Some records are highly dubious as they refer to lichens which are not expected to be found in the Maltese Islands while a small number of records refer to non-lichenised or lichenicolous fungi. These reasons have contributed to a reduction in the count. On the other hand, some lichen varieties appearing in Sommier and Caruana Gatto (1915) have been raised to species rank thus adding to species number.

All lichens mentioned in Gulia (1858–59) except for *Lecanora flavescens* (currently *Lecanora rupicola* subsp. *sulphurata*) and *Endocarpon panduraeforme* are also included in the checklist of Sommier and Caruana Gatto (1915). No information or current name for *E. panduraeforme* could be found by the present author.

Sommier and Caruana Gatto (1915) used the term 'endemic' twice only – for the lichenicolous fungus *Skyttea heterochroae* [No. 92: *Lecidea pertusariicola*] and for *Toninia paradoxa* [No. 94: *Thalloedema paradoxum*]. For ten other species the term "known only from Malta (or Gozo)" was used. For two lichen varieties also quoted as known from Malta only [No. 51: *Caloplaca marmorata* var. *cephaloidea* and No. 56: *Lecaniella pseudocyrtella* var. *Melitensis*] no description was published in Jatta (1909-11).

In Lanfranco (1989), twelve lichen species and varieties were listed. These were considered 'presumably endemic' since at that time the lichens of the Maltese Is-

lands were still awaiting a thorough investigation (Lanfranco, 1989) and the only significant information available was that of Sommier and Caruana Gatto (1915).

This work has revealed that seven out of the eleven truly lichen species that were reported in Sommier and Caruana Gatto (1915) as being present in Malta (or Gozo) only, have in fact been reported from places other than the Maltese Islands (Table 1 & 2).

Out of the remaining four lichens No. 87: *Lecidea auriculata* var. *calcicola* has been considered a misidentification (see Table 2 note 30). Consequently, only three lichen species listed in Sommier and Caruana Gatto (1915) still hold the description of being 'presumably endemic' (Lanfranco, 1989) until this is confirmed. These are No. 47: *Caloplaca melitensis*, No. 80: *Biatora fusconigrescens* and No. 94: *Toninia paradoxa* [*Thalloedema paradoxum*]. Their status will be clarified once lichen material from Malta deposited in the Herbarium Jatta in Naples is examined.

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