

Bryophytes of Libya. I. Hepatophyta: an Annotated Checklist

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THE list of Hepatophyta in Libya includes 29 taxa in 15 genera, 14 families, 7 orders and two classes. Anthocerotae is represented by one species while Hepaticae by 27 species. No species were reported after 1968; recent collections are therefore necessary. Riccia is dominant being represented by 12 species. Synonyms are given in a separate list.

Keywords : Hepatophyta, Checklist, Libya.

Introduction

Research work on Hepatophyta (Hepaticas and Anthocerotes) of Libya (Fig. 1) started more than one century ago. However the number of papers published is relatively small; being published at long irregular intervals as follows: Ascherson (1881), Baccarini (1913), Massalongo (1914), Zodda (1914), Pampanini (1917), Zodda (1926), Pampanini (1931), Maire & Weiler (1939), Bizot & Lauriol (1950), Jovel-Ast (1956), Rungby (1962), Jovel-Ast & Bisscher (1968) and Ros et al. (1999, 2007). Those above authors reported 29 taxa (27 species, one subspecies and one variety) in 15 genera, 14 families, seven orders and two classes as comes below in the Table 1.

Dates of collection of the 29 taxa are as expressed briefly in the legend above table one. The available literature (Pampanini, 1931) does not give more precise dates and gives sites of collection (Fig.1) of only the following taxa: *Riccia ciliata*, Benghazi; *R. lamellosa*, Benghazi; *R. nigrella*, Benghazi; *Pellia endiviifolia*, Cavra (Wadi Belgadir) and Wadi Marsa Susa; *Plagiochasma rupestre*, Cavra (Wadi Samber) and *Targionia hypophylla*, Cerene.

Annotations

Based on the list above the following annotations were listed:

1- Class Anthocerotae is represented in Libya by one family and one species while class Hepaticae by 13 families and 27 species.

2- Marchantiales is represented by 6 families, Jungermanniales and Sphaerocarpales by two families each while Fossombroniales, Lunulariales and Pelliales by one family each.

3- All families of Hepaticae are represented by one genus each, only Aytoniaceae is represented by two genera.

4- Genus *Riccia* is dominant being represented by 12 species, while the majority of the other genera are represented by only one species.

5- Twenty-five species are reported during or after 1962 (symbol •), while other symbols [(•), o, (o) and +] represent one species each.

6- *Porella cordaeana* (Huebener) Moore and *Plagiochila africana* Steph. are not given in the above list because they were erroneously reported from Libya (Rungby, 1962; Ros et al., 1999 and Söderström et al., 2002).

It has to be mentioned in conclusion and based on the given references that no hepatophytes collections were made after 1968, which means that the present list represents the hepatophytes of Libya since about 50 years ago. No need to say that recent collections are therefore necessary from this country.

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Synonyms

Synonyms mentioned below are only those used in publications related to Libya.

Fossombronia husnotii Corb. = *Fossombronia caespitiformis* subsp. *multispira* (Schiffn.) J.R. Bray and D.C. Cargill in Stotler et al.
Pellia fabroniana Raddi = *Pellia endiviifolia* Dicks.) Dumort
Plagiochasma algericum Steph. = *Plagiochasma rupestre* (J. R. Forst. & G. Forst.) Steph.
Riccia trichocarpa M. Howe = *Riccia crinita* Taylor

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Fig.1. Map of Libya and sites of collection of some hepatics; 1- Marsa Susa, 2- Cerene, 3-Benghazi and 4- Cavra.

TABLE 1. Names of the 29 Hepatophyta taxa, families and orders they belong to and other relevant information, where o= Report based on collections published before 1962, = Report based on at least one collection published during or after 1962, (o)= Doubtful report based on collections published before 1962, (•)= Doubtful report based on at least one collection published during or after 1962, + = Report without precise collection data or locality. These symbols are used here exactly as given in Roset *et al.* (2007) for the purpose of giving herefurther meaningful annotations.

Class Order	Family	Species	Symbol
Anthocerotae			
Anthocerotales	Anthocerotaceae	<i>Phaeoceros carolinianus</i> (Michx.) Prosk.	•
Hepaticae			
Fossombroniales	Fossombroniaceae	<i>Fossombronia caespitiformis</i> subsp. <i>Caespitiformis</i> De Not. ex Rabenh.	•
		<i>F. caespitiformis</i> subsp. <i>multispira</i> (Schiffn.) J.R.Bray & D.C. Cargill.	o
Jungermanniales	Arnelliaceae	<i>Southbya nigrella</i> (De Not.) Henriq.	•
	Cephaloziellaceae	<i>Cephaloziella baumgartneri</i> Schiffn.	•
Lunulariales	Lunulariaceae	<i>Lunularia cruciata</i> (L.) Lindb.	•
	Aytoniaceae	<i>Plagiochasma rupestre</i> (J.R. Forst. & G. Forst.) Steph.	(o)
		<i>Reboulia hemisphaerica</i> (L.) Raddi	•
	Cleveaceae	<i>Athalamia spathysii</i> (Lindenb.) S.Hatt.	•
	Conocephalaceae	<i>Conocephalum conicum</i> (L.) Dumort.	(•)
	Oxymitraceae	<i>Oxymitra incrassata</i> (Brot.) Sérgio & Sim-Sim	•
		<i>Riccia atromarginata</i> Levier	•
		<i>R. cavernosa</i> Hoffm.	•
		<i>R. ciliata</i> Hoffm.	•
		<i>R. crinita</i> Taylor	•
		<i>R. crustata</i> Trab.	•
Marchantiales	Ricciaceae	<i>R. crystallina</i> L. emend. Raddi	•
		<i>R. gougetiana</i> Durieu & Mont.	+
		<i>R. lamellosa</i> Raddi	•
		<i>R. michelii</i> Raddi	•
		<i>R. nigrella</i> DC.	•
		<i>R. sorocarpa</i> Bisch. var. <i>sorocarpa</i> . Bisch.	•
		<i>R. trabutiana</i> Steph.	•
	Targioniaceae	<i>Targionia hypophylla</i> L.	•
		<i>T. lorbeeriana</i> Müll. Frib.	•
Pelliiales	Pelliaceae	<i>Pellia endiviifolia</i> (Dicks.) Dumort.	•
Sphaerocarpales	Riellaceae	<i>Riella cyrenaica</i> Maire	•
	Sphaerocarpaceae	<i>Sphaerocarpos michelii</i> Bellardi	•
		<i>S. texanus</i> Austin	•

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حزازيات ليبيا . ١. قائمة مرجعية للحزازيات المنبطة

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تشتمل قائمة Hepatophyta في ليبيا على ٢٩ وحدة تصنيفية تنتهي إلى ١٥ جنساً و ١٤ فصيلة، و ٧ رتب وطبقتين. وتمثل طبقه Anthocerotae بنوع واحد في حين تمثل الطبقه Hepaticae بـ ٢٧ نوعاً. وكل الأنواع مسجلة قبل عام ١٩٦٨. ولذلك من الضروري جمع عينات أكثر حداة من هذه النباتات. والجنس السائد هو Riccia فهو ممثل بـ ١٢ نوعاً. وفي نهاية البحث توجد قائمة بالاسماء المرادفة للنباتات التي لها اسماء مرادفة بلبيا.

