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Non-marine Ostracoda from Mediterranean Islands

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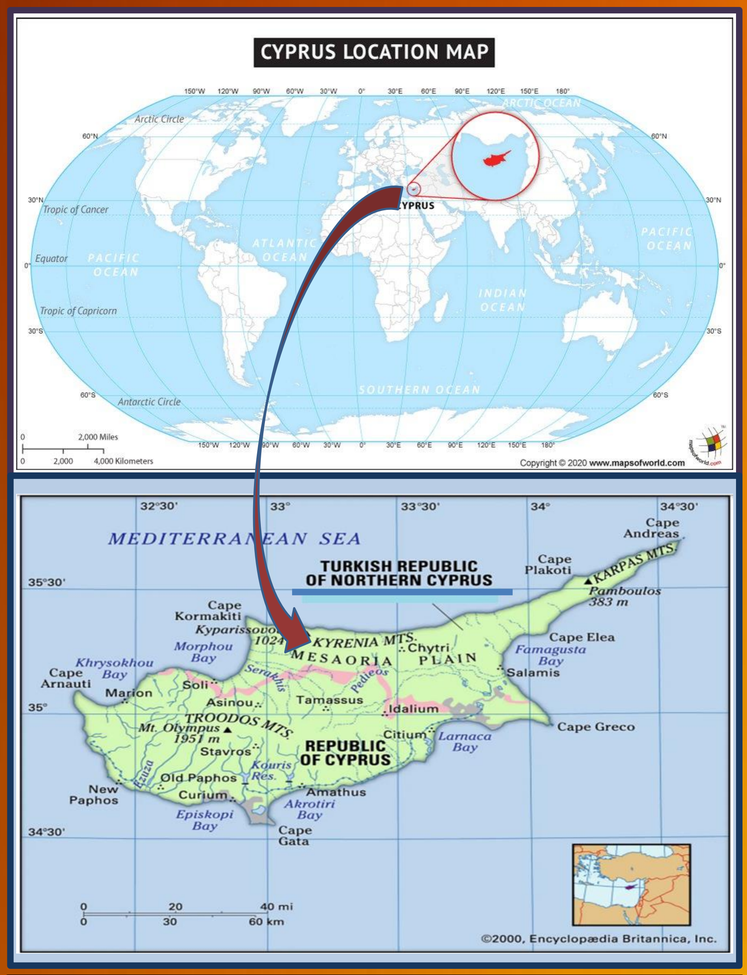

Figure 2: Turkish Republic of Northern Cyprus.

Introduction: Islands are isolated areas and/or regions where species or populations are adapted to certain kinds of ecological conditions. In terms of ostracods, suitable water conditions can provide possibilities for their survival. However, unlike many other taxonomic groups, distribution of non-marine ostracods to the islands is produced as passive way. In this context they can be transported between or among the islands by means of hosts such as birds, humans or other agents. Up until now, ostracods are not well known from all Mediterranean islands. In this master study thesis we were collected non-marine ostracods list around world by using literature. In the Cyprus, studies about Ostracoda are not enough. Contributions into the ostracod studies have been done by several authors (e.g., Ducloz, 1972, Balık et al. 2008, Manzi et al. 2016, Wouters 2017, Polidorou et al. 2021) and found **7 species** and **2 spp**. The aim of this work is determination of the distribution and ecological characteristics of Ostracoda (Crustacea) species in the **Turkish Republic of Northern Cyprus** and understand of how ostracods are dispersed to the islands.

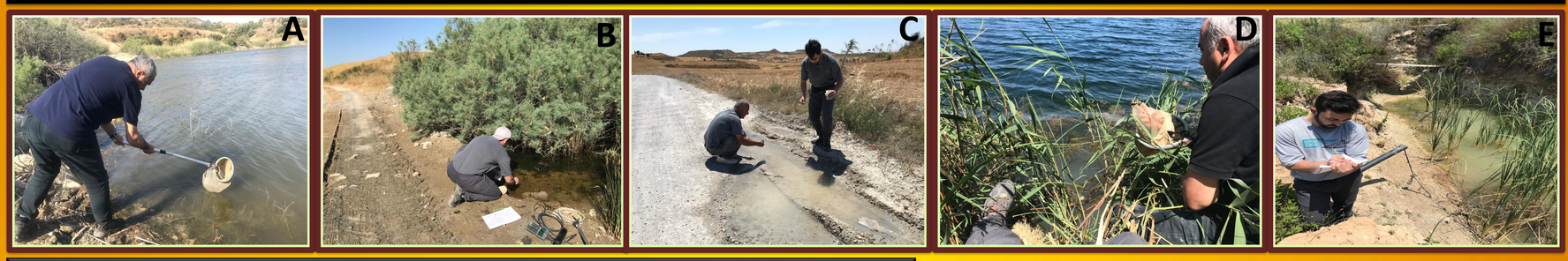

Figure 1: shows sampling sites on island. A : lake, B: creek, C: puddle, D: lake, E: spring pool

Figure 3: ***Loculicytheretta*** *pavonia.*

Material and methods: Samples **(Figure 1)** were collected with a 125 µm phytoplankton hand net during **18-22/05/2022**. Total of **64 water bodies (e.g., pools, ponds, dams, fountains, creeks, spring waters, troughs, puddles, brackish and sea water) were collected from** the **Turkish Republic of Northern Cyprus (Figure 2)**. The samples are currently being examined in the Bolu Abant İzzet Baysal Laboratory.

	Genera	Species		Genera	Species
1	*Candona* Baird, 1845	5	24	*Loxoconcha* Sars, 1866	1
2	*Candonocypris* Sars, 1894	1	25	*Metacypris* Brady & Robertson, 1870	1
3	*Candonopsis* Vávra, 189	1	26	*Mixtacandona* Klie, 1938	2
4	*Cyclocypris* Brady & Norman, 1889	3	27	*Nannokliella* Schäfer, 1945	1
5	*Cypria* Zenker, 1854	4	28	*Neglecandona* Krstic, 2006	2
6	*Cyprideis* Jones, 1857	3	29	*Notodromas* Lilljeborg, 1853	1
7	*Cypridopsis* Brady, 1867	6	30	*Paralimnocythere* Carbonnel, 1965	1
8	*Cypris* O.F. Müller, 1776	4	31	*Physocypria* Vávra, 1897	1
9	*Cytherissa* Sars, 1925	1	32	*Plesiocypridopsis* (Rome, 1965) McKenzie 1971	2
10	*Darwinula* Brady & Robertson, 1885	1	33	*Potamocypris* Brady, 1870	5
11	*Eucypris* Vávra, 1891	4	34	*Prionocypris* Brady & Norman, 1896	1
12	*Hemicytherura* Elofson, 1914	1	35	*Pseudocandona* Kaufmann, 1900	4
13	*Fabaeformiscandona* Krstić, 1972	1	36	*Pseudolimnocythere* Klie, 1938	1
14	*Herpetocypris* Brady & Norman, 1889	4	37	*Psychrodromus* Danielopol & McKenzie, 1977	2
15	*Heterocypris* Claus, 1892	4	38	*Sarscypridopsis* McKenzie, 1977	2
16	*Ilyocypris* Brady & Norman, 1889	6	39	*Stenocypria* G.W. Müller, 1901	1
17	*Isocypris* G.W. Müller, 1908	2	40	*Stenocypris* Sars, 1889	1
18	*Kovalevskiella* Klein, 1963	3	41	*Bradleycypris* McKenzie, 1982	2
19	*Kliella* Schäfer, 1945	1	42	*Tonnacypris* Diebel & Pietrzeniuk, 1975	1
20	*Leptocythere* Sars, 1925	1	43	*Trajancypris* Martens, 1989	1
21	*Leucocythere* Kaufmann, 1990	1	44	*Mixtacandona* Klie, 1938	2
22	*Limnocythere* Brady, 1868	1	45	*Tyrrhenocythere* Ruggieri, 1955	1
23	*Limnocytherina* Negadaev-Nikonov, 1967	1	46	*Vestalenula* Rossetti & Martens, 1998	3

Table 1: Total of 46 genera of Ostracoda listed from Mediterranean islands.

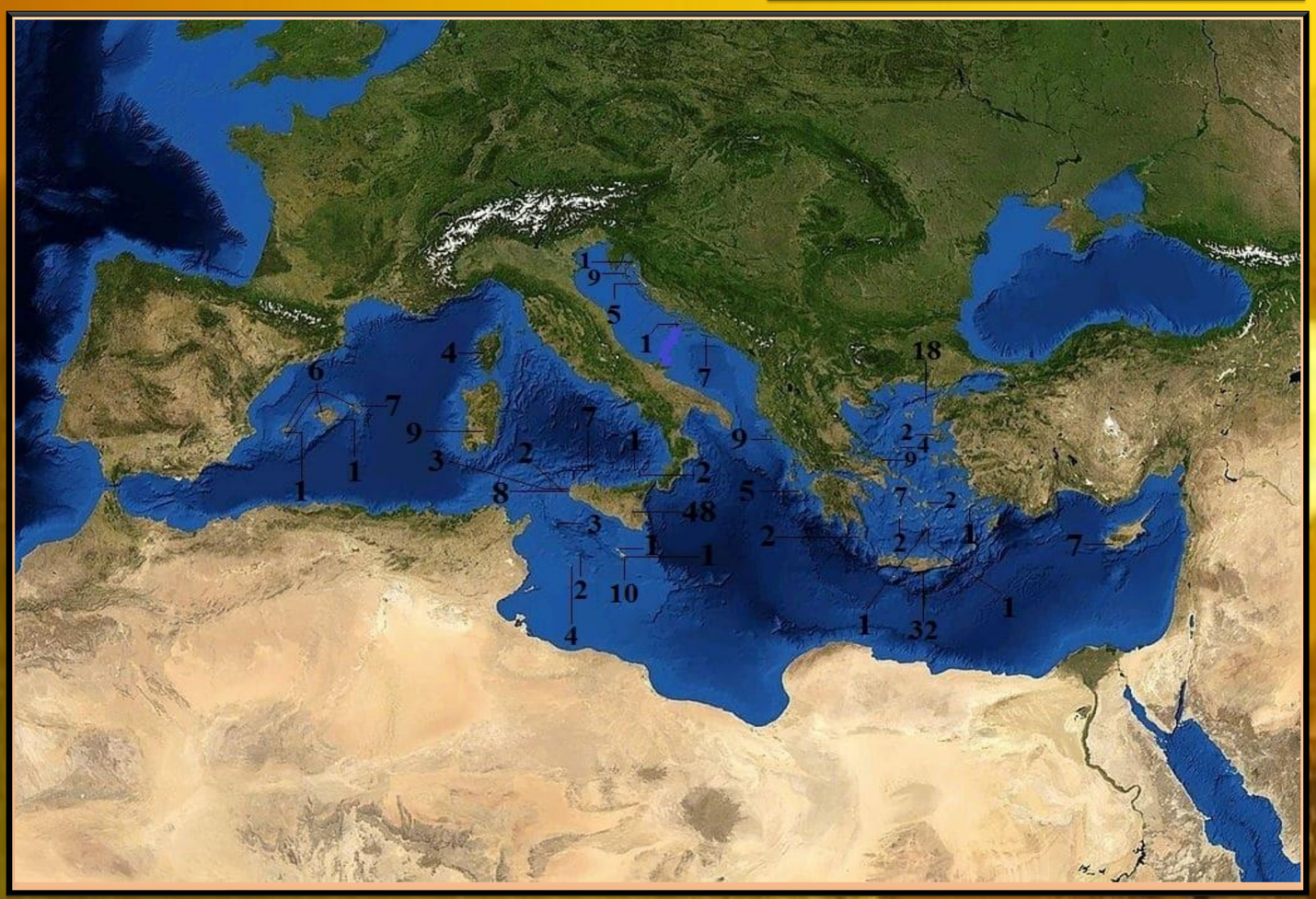

Figure 4 : Mediterranean islands and the number of Ostracoda species on these islands.

Preliminary Results: In our ongoing work, we encountered couple of interesting ostracods **(Figure 3)** but identification is still under examination. Knowledge about how ostracods are dispersed aids creating ecological and/or biogeographical models. Thus, beginning from the available literature, we worked on the ostracods reported from Mediterranean islands **(Figure 4)**. Sicily, with 48 species, showed the highest diversity while ***Cyprideis torosa*** was the most common ostracod in the Mediterranean islands. Accordingly, we found 107 taxa belonging to 46 genera **(Table 1)**. Among them, two genera (***Cypridopsis, Ilyocypris***) were the most frequently reported groups among the islands.

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