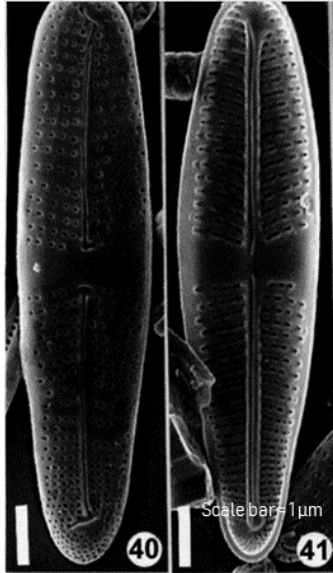


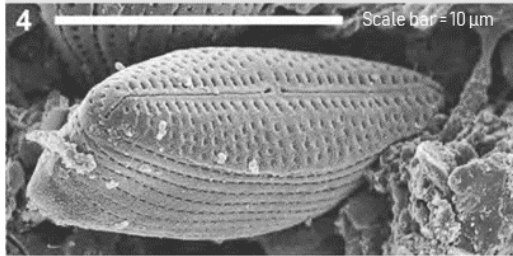
# Ogledni zadatak

Tema: Morfologija dijatomeja

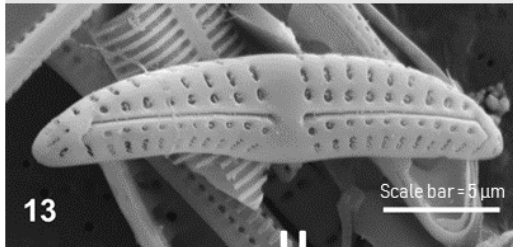
*Tripterion margaritae*



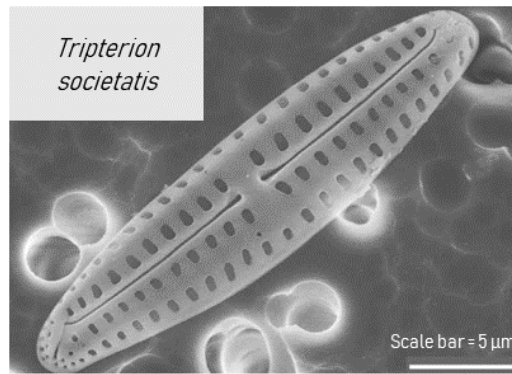
*Chelonicola costaricensis*



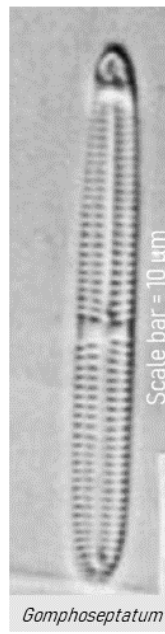
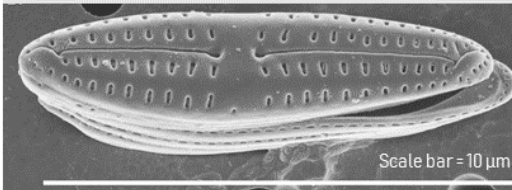
*Medlinella amphoroidea*



*Tripterion societatis*

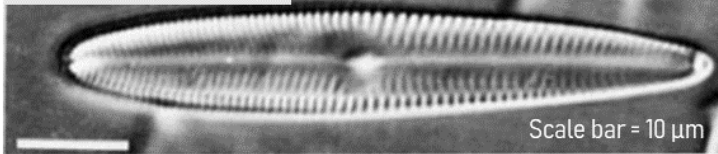


*Poulinea lepidochelonicola*

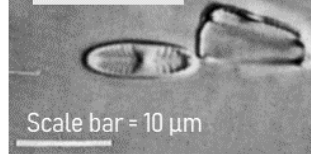


Fotografije silikatnih  
ljušturica dijatomeja na  
elektronskom  
mikroskopu

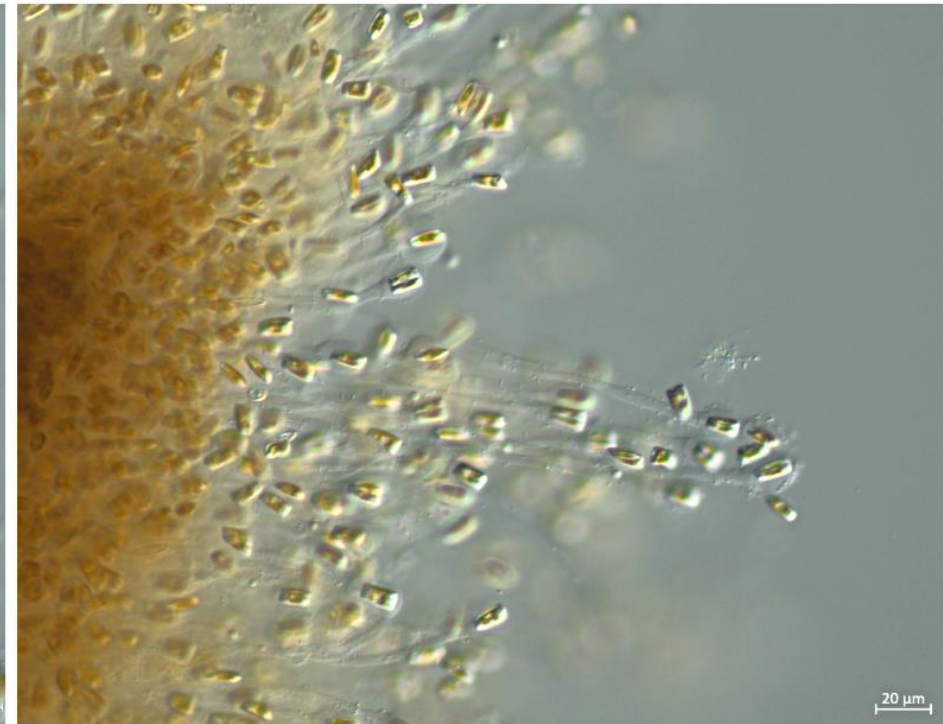
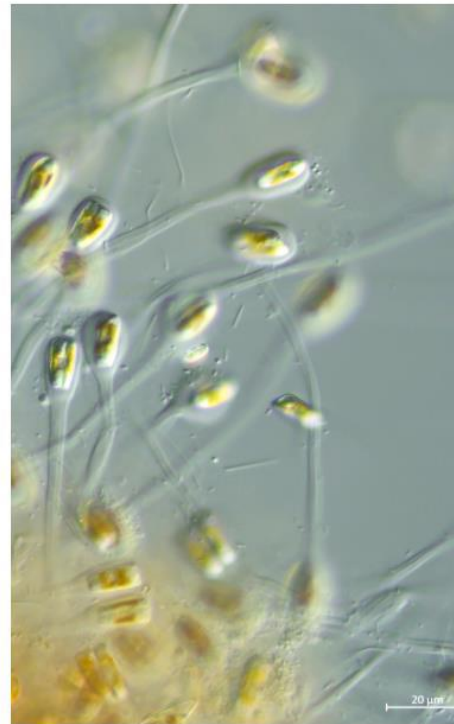
*Pseudogomphonema*



*Cuneolus*



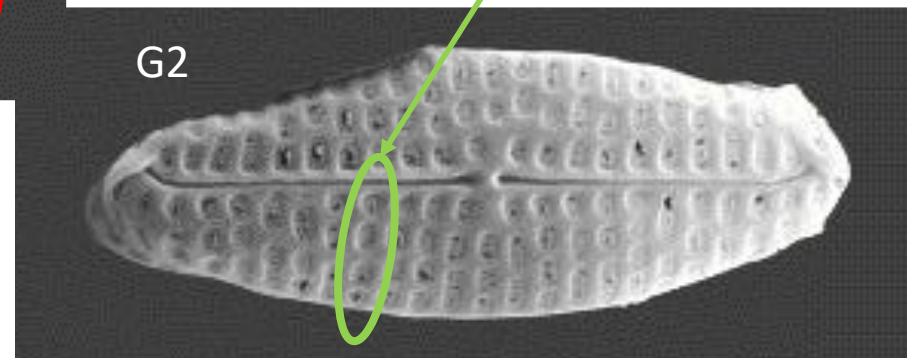
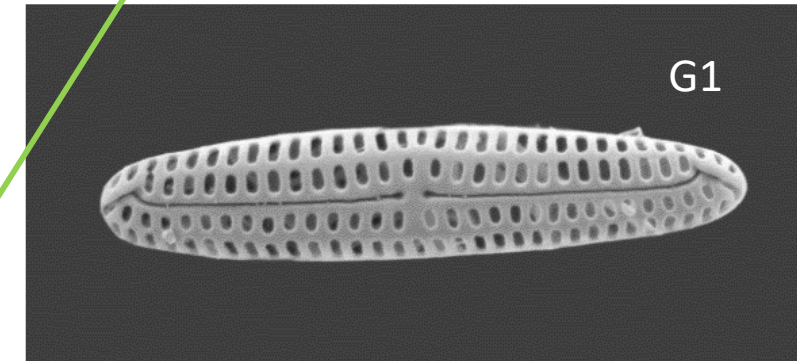
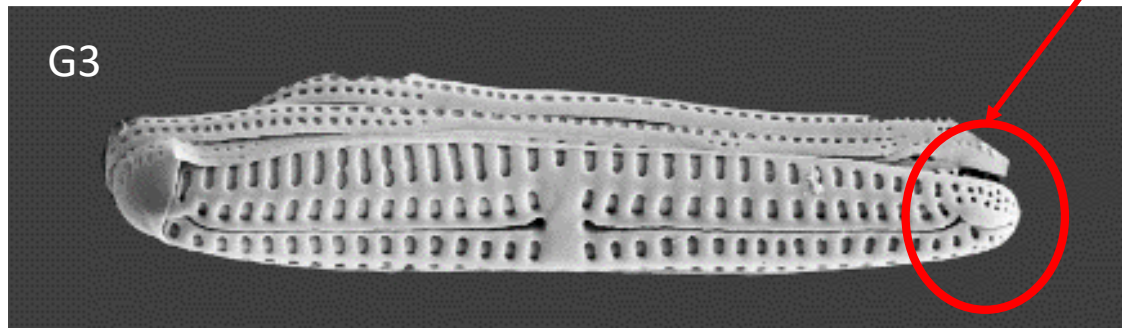
Fotografije živih kolonija  
dijatomeja na  
svjetlosnom mikroskopu



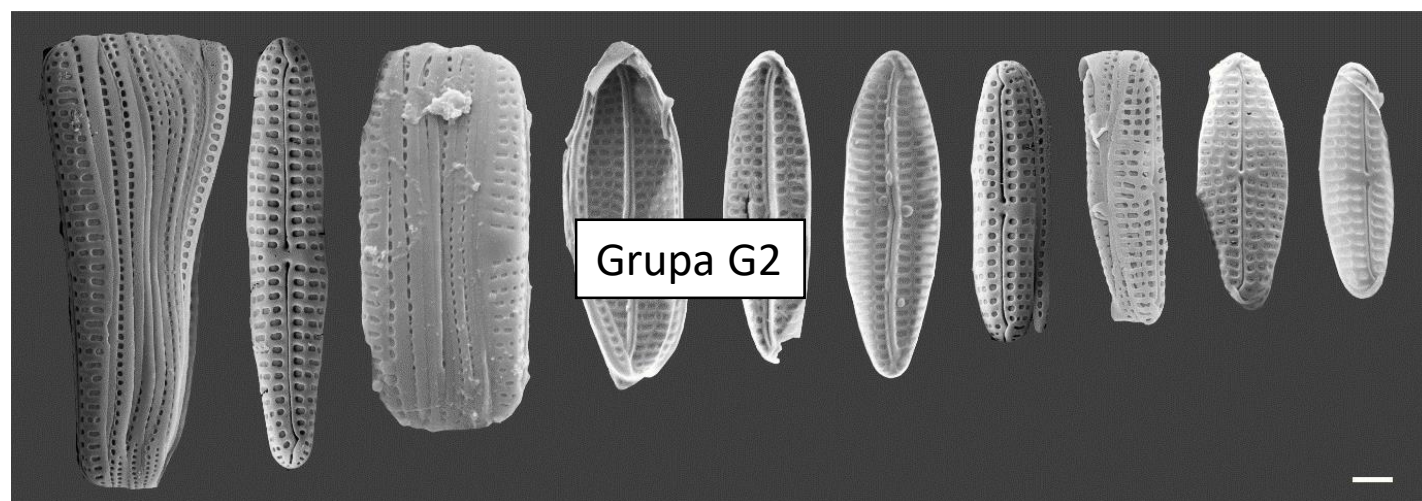
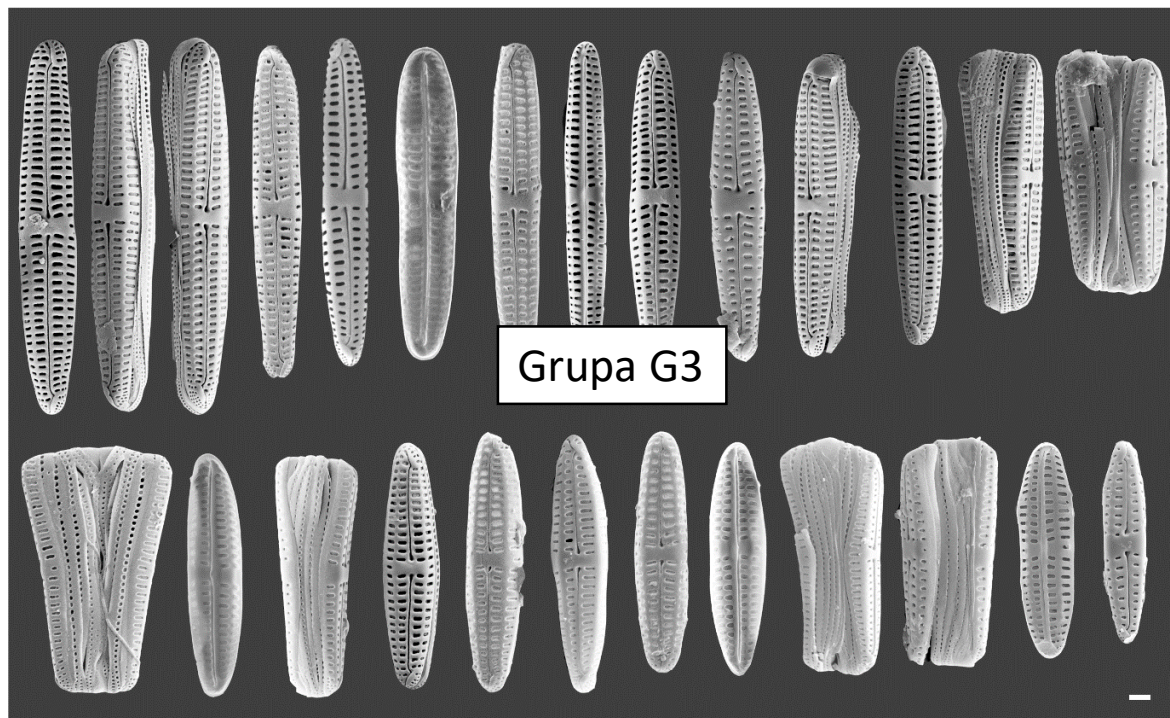
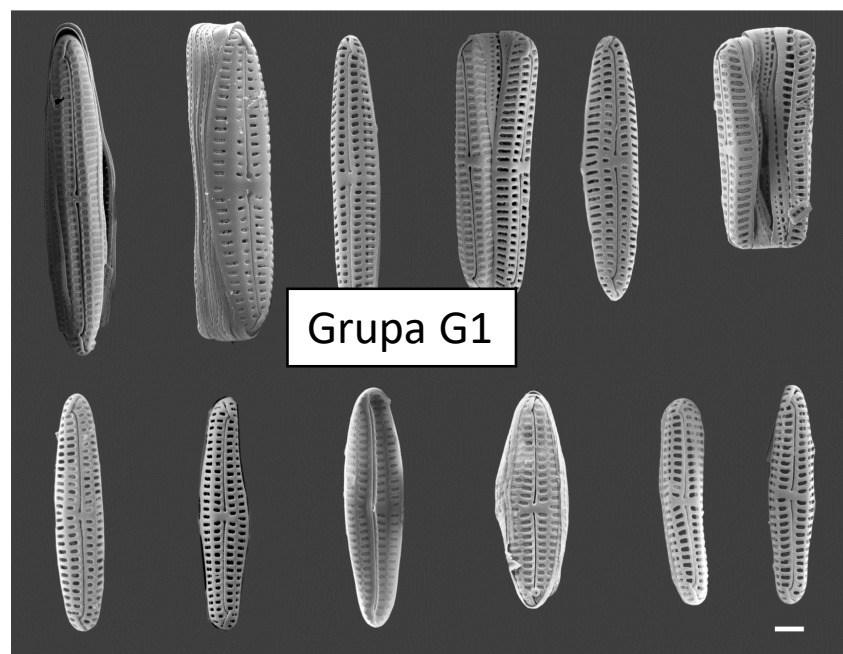
- Dijatomeje su prvo podijeljenje u 3 morfološke grupe po njihovim karakteristikama
- svaka vrsta iz literature je jedna grupa
- Morfološke karakteristike koje su korištene za identifikaciju grupa su broj areola i polja s porama

**Table 5.** Diatom groups and their characteristics.

species	group	Pore field	Number of areolae per stria
<i>Chelonicola caribea</i>	G1	No	2
<i>Chelonicola costaricensis</i>	G2	No	3 or more
<i>Poulinea lepidochelica</i>	G3	Yes	2







Dijatomeje su podijeljene u 3 grupe te je za svaku stanicu izmjereno:

- ***diatomID*** – identifikacijska oznaka svake ljusturiče dijatomeja
- ***sample*** – stanište (domaćin) s kojeg je uzet originalan uzorak
- ***group*** – morfološka grupa koja predstavlja vrste dijatomeja
- ***length\_um*** – duljina u  $\mu\text{m}$
- ***width\_um*** – širina u  $\mu\text{m}$
- ***narrowness*** – omjer duljine i širine
- ***assimetry*** – omjer gornje i donje polovice
- ***striae*** – broj strija („rebra”) u 10  $\mu\text{m}$  duljine

	A	B	C	D	E	F	G	H
1	diatomID	sample	group	length_um	width_um	narrowness	assimetry	striae
2	diatom_1	HPM25	G1	8.27	1.7	4.864705882	1.022167488	38
3	diatom_2	HPM25	G1	7.14	1.59	4.490566038	1.067251462	40
4	diatom_3	HPM25	G1	8.76	1.87	4.684491979	1.020833333	38
5	diatom_4	HPM25	G1	9.04	2.41	3.751037344	0.956331878	38
6	diatom_5	HPM69	G1	8.53	1.86	4.586021505	1.097744361	28
7	diatom_6	HPM69	G1	10.67	2.42	4.409090909	0.968634686	30
8	diatom_7	HPM9	G1	10.16	1.99	5.105527638	0.875954198	25
9	diatom_8	HPM9	G1	14.34	2.67	5.370786517	1.026950355	23
10	diatom_9	PTB24	G1	8.26	1.67	4.946107784	1.037220844	36
11	diatom_10	PTB24	G1	8.07	1.42	5.683098592	0.992555831	42
12	diatom_11	PTB24	G1	10.89	1.73	6.294797688	0.956834532	40
13	diatom_12	PTB24	G1	8.07	1.68	4.803571429	1.056265985	21
14	diatom_13	PTB24	G1	13.78	1.91	7.214659686	0.988505747	25
15	diatom_14	PTB29	G1	6.54	2.11	3.099526066	0.920118343	40
16	diatom_15	PTB29	G1	7.71	2.02	3.816831683	1.101092896	34
17	diatom_16	PTB31	G1	7.84	1.88	4.170212766	1.090425532	36
18	diatom_17	PTB31	G1	10.57	2.26	4.67699115	1.072407045	32
19	diatom_18	PTB31	G1	10.04	1.71	5.871345029	0.972277228	34
20	diatom_19	PTB31	G1	6.21	1.9	3.268421053	1.059405941	36
21	diatom_20	PTB31	G1	8.75	2.09	4.186602871	0.931415929	32
22	diatom_21	PTB33	G1	8.25	1.76	4.6875	1.276056338	36
23	diatom_22	PTB42	G1	9.08	1.96	4.632653061	1.11627907	36
24	diatom_23	PTB42	G1	8.17	1.68	4.863095238	1.050505051	40
25	diatom_24	PTB42	G1	7.01	2.29	3.061135371	1.04398827	38
26	diatom_25	PTB42	G1	8.03	1.67	4.808383234	1.025252525	38
27	diatom_26	PTB42	G1	6.34	1.45	4.372413793	1.009615385	38
28	diatom_27	TB11	G1	7.78	1.85	4.205405405	1.047244094	38
29	diatom_28	TB115	G1	9.27	1.87	4.957219251	0.876267748	36
30	diatom_29	TB116	G1	10.09	1.65	6.115151515	0.965183752	36
31	diatom_30	TB12	G1	6.96	1.75	3.977142857	0.971671388	38

# Ciljevi i pitanja

- Usporediti morfološke mjere između grupa i utvrditi postoji li značajna statistička razlika.
- Postoji li odvajanje grupa dijatomeja na temelju svih izmjerenih numeričkih varijabli (duljina, širina itd.)?