Rasprostranjenost i ekološka uvjetovanost trzalaca (Diptera, Chironomidae) u krškim jezerima

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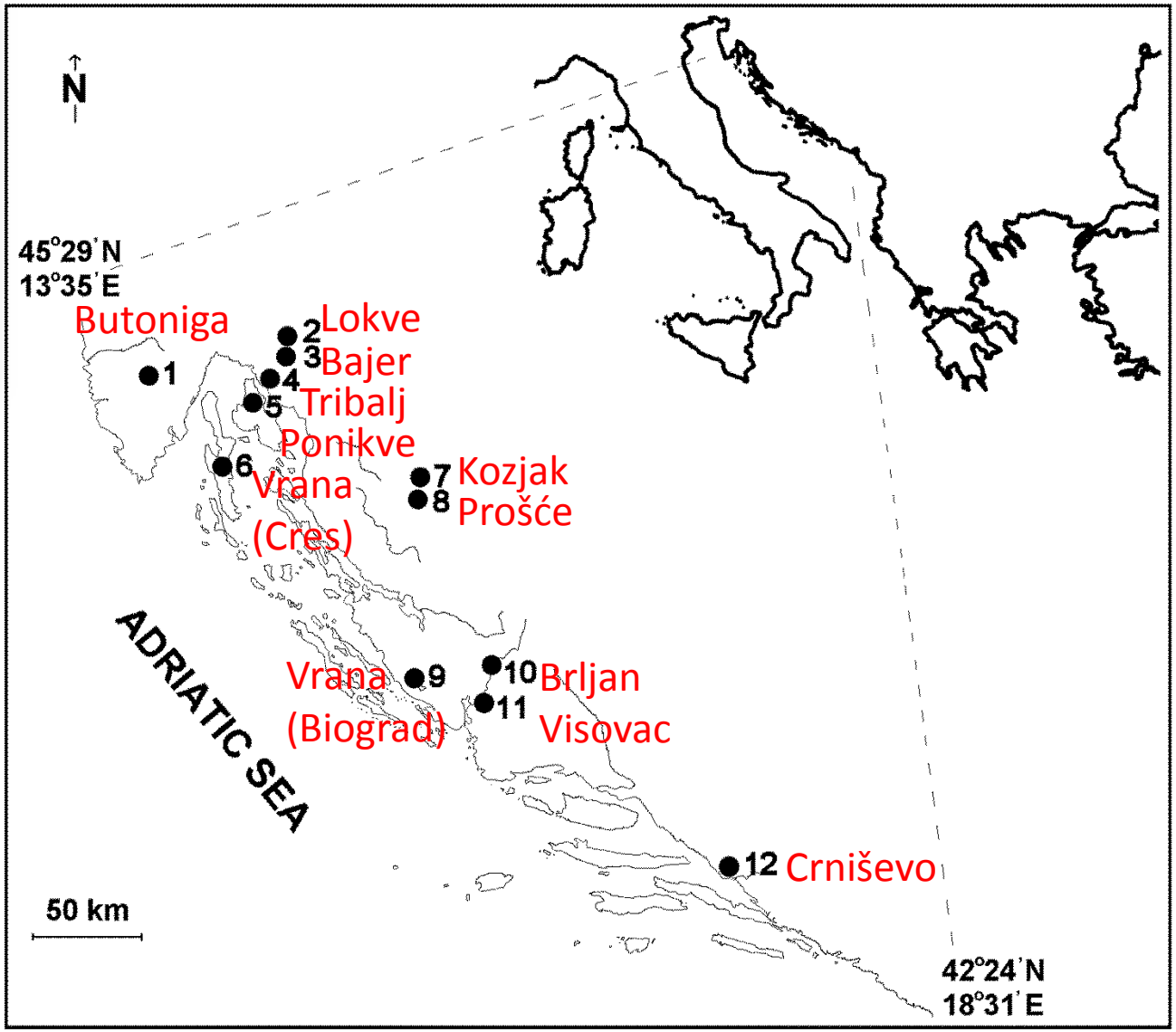
Prvi znanstveni simpozij o biologiji slatkih voda, Zagreb 2015


N
45°29′N
13°35′E
Butoniga
1
Lokve
2
3
Bajer
4
5
Tribalj
Ponikve
6
Vrana
(Cres)
7
8
Kozjak
Prošće
ADRIATIC SEA
Vrana
(Biograd)
9
10
11
Brljan
Visovac
12
Crniševo
50 km
42°24′N
18°31′E

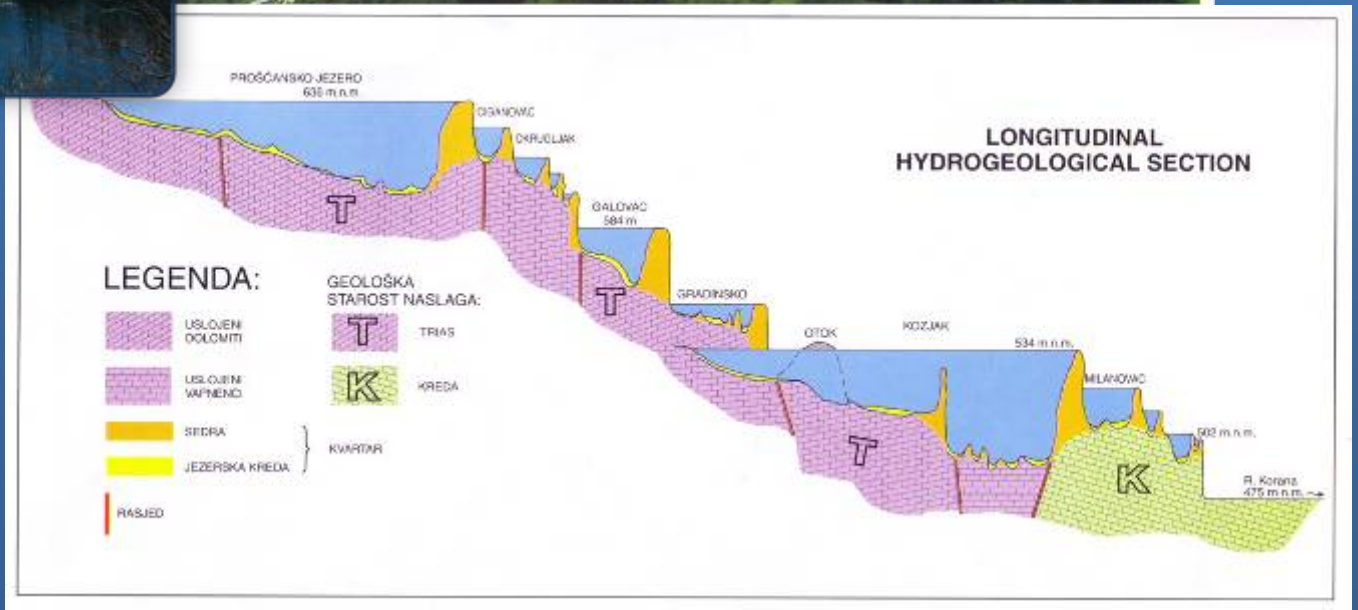
Osnovna obilježja istraživanih jezera

	Jezero	Oznaka	Nadmorska visina (m.n.m.)	Površina	Maks. dubina	Salinitet	Tip	Stupanj trofije
			(m)	(km^2)	(m)	(‰)		
1	Butoniga	BUT	41	2,45	13	0	akumulacija	mezo-eutrofno
2	Lokve	LOK	770	2,1	40	0	akumulacija	oligotrofno
3	Bajer	BAJ	717	0,56	7	0	akumulacija	mezo-eutrofno
4	Tribalj	TRI	60	0,41	4	0	akumulacija	mezo-eutrofno
5	Ponikve	PON	19	0,75	5	0	akumulacija	mezo-eutrofno
6	Vrana (Cres)	VRA	13	5,8	78	0	duboko jez.	oligotrofno
7	Kozjak	KOZ	535	0,82	46	0	krško protočno	oligotrofno
8	Prošće	PRO	636	0,7	37	0	krško protočno	oligo-mezotrofno
9	Vrana (Biograd)	VRN	0,43	30,8	3,9	1,2 - 3,9	plitko	eutrofno
10	Brljan	BRLJ	190	0,47	17	0	krško protočno	oligo-mezotrofno
11	Visovac	VIS	33	7,9	24	0	krško protočno	oligo-mezotrofno
12	Crniševo	CRN	0,8	0,5	31	1,1 - 1,5	duboko	mezotrofno

… krška protočna jezera; Prošće i Kozjak

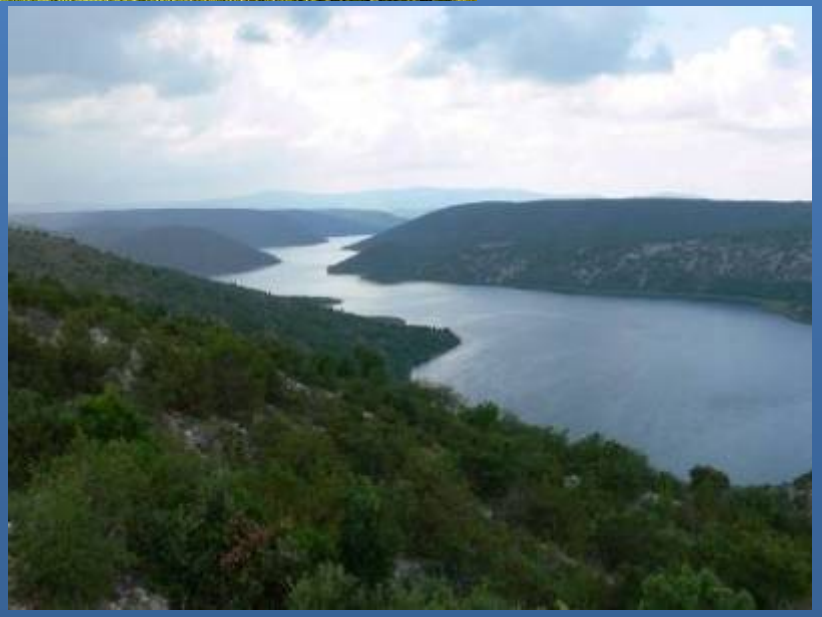
Kozjak (7)

Prošće (8)



… krška protočna jezera; jezero Brljan i Visovačko jezero

Brljan (10)



Visovac (11)

… potopljene krške formacije / polja

Vransko jezero (Cres) (6)

Vransko jezero (Biograd) (9)

Crniševo (12)

… akumulacije

Butoniga (1)

Lokve (2)

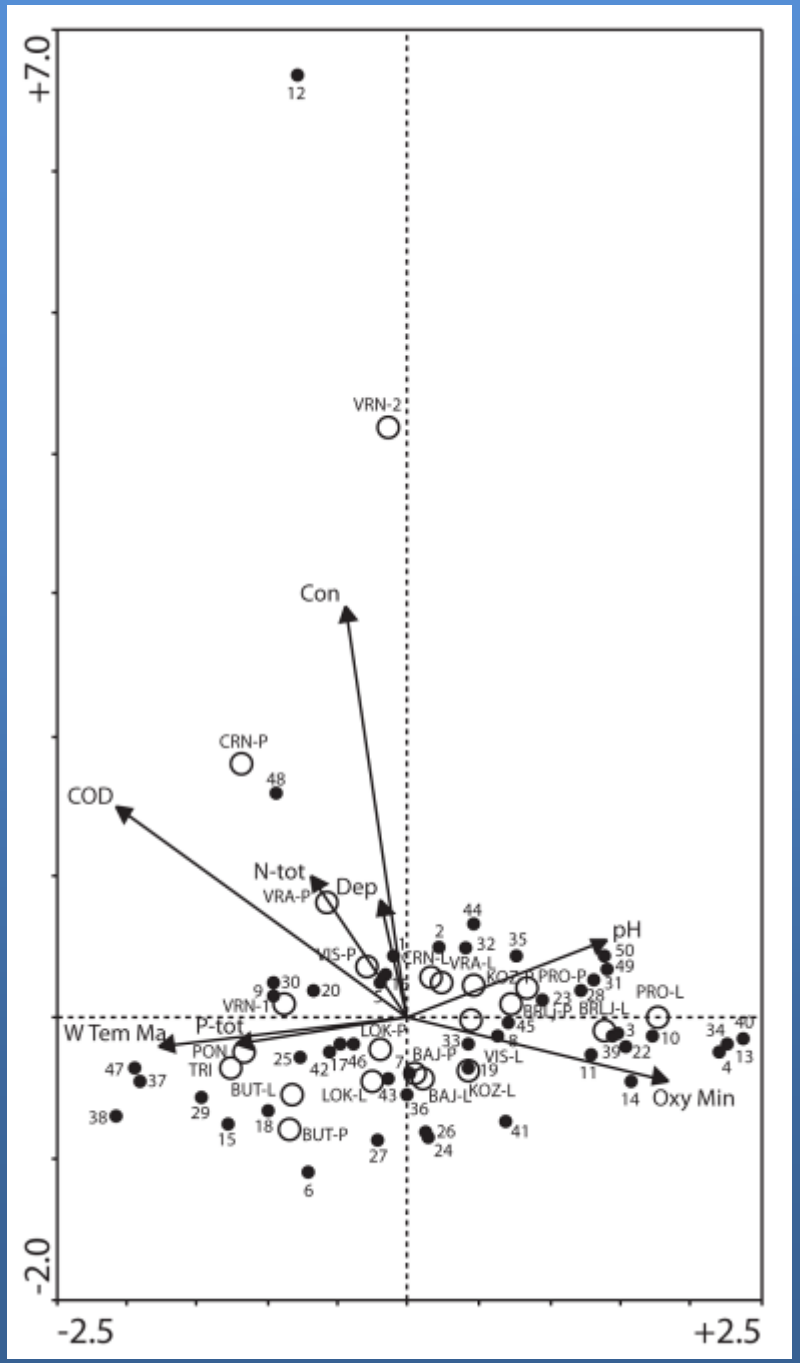
Bajer (3)

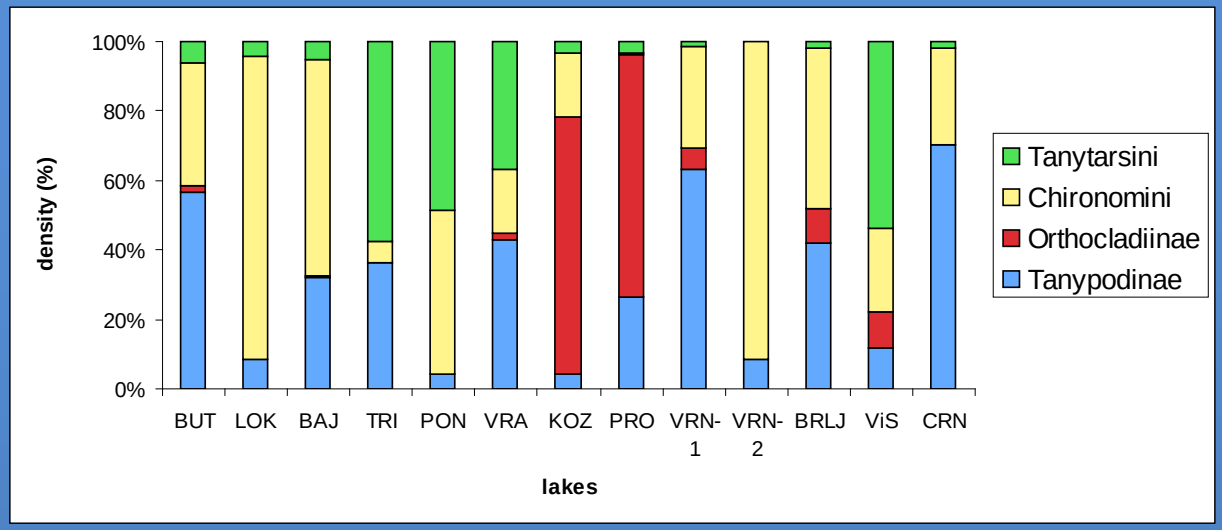
Ponikve (5)

Tribalj (4)

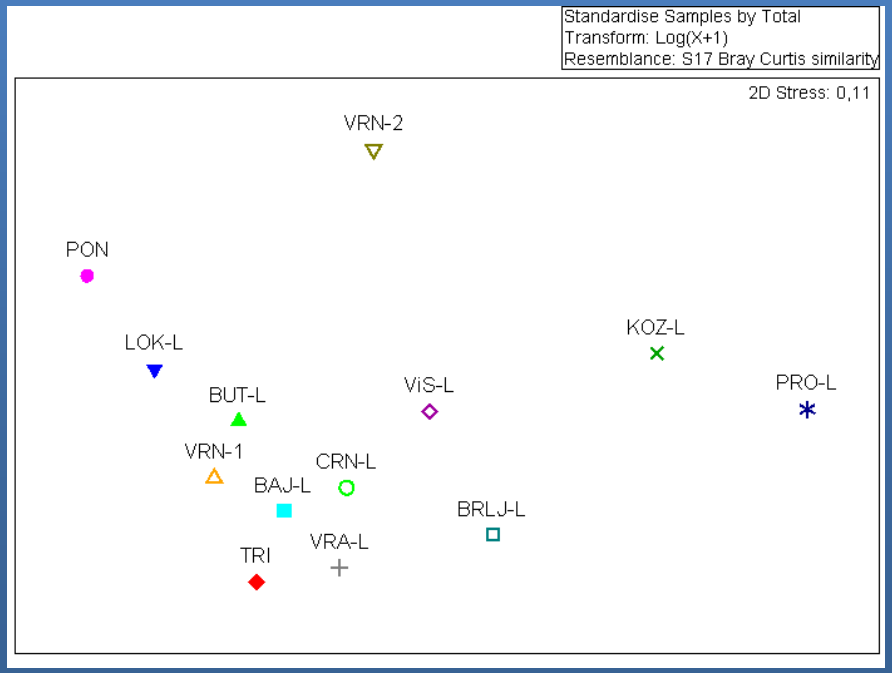
Odabrani fizikalno-kemijski pokazatelji istraživanih jezera

	BUT	LOK	BAJ	TRI	PON	VRA	KOZ	PRO	VRN-1	VRN-2	BRLJ	VIS	CRN-P	CRN-L
Dubina (m)	13	26	7	4	5	78	40	30	4	3	17	23	30	6
Maks. temp. vode (°C)	20,9	12,9	17,7	29,8	27,5	13,7	8,5	10,0	29,1	28,0	16,8	16,8	14,4	25,4
Min. konc. O_2 (mgl^{-1})	0,1	8,1	6,5	7,8	7,2	6,0	6,7	4,2	5,2	7,6	6,6	0,9	0,1	5,8
pH	7,57	7,77	7,87	8,08	7,77	8,19	7,92	7,98	8,02	8,16	8,03	7,66	7,65	8,20
Provod. (μScm^{-1})	359	143	182	330	424	433	406	418	1915	6152	614	514	2488	834
Maks. sal. (‰)	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,2	3,9	0,0	0,0	1,5	1,1
COD_{Mn} (mgl^{-1})	2,69	1,75	2,01	3,24	2,63	1,10	1,07	0,80	5,88	8,00	1,18	0,85	4,07	1,96
$N\text{-}NO_3$ (mgl^{-1})	0,76	0,315	0,38	0,085	0,196	0,009	0,532	0,490	1,110	1,490	0,410	0,270	0,370	0,350
N-tot (mgl^{-1})	1,166	0,482	0,57	0,44	0,3079	0,173	0,643	0,740	2,017	1,857	0,571	0,342	0,770	0,550
P-tot (mgl^{-1})	0,0629	0,01	0,016	0,027	0,0166	0,008	0,012	0,012	0,037	0,019	0,029	0,012	0,041	0,023
Min. prozirnost (m)	1,2	3,6	2,4	0,6	2,0	10,5	8,0	5,5	1,2	1,8	1,2	3,0	2,2	2,2

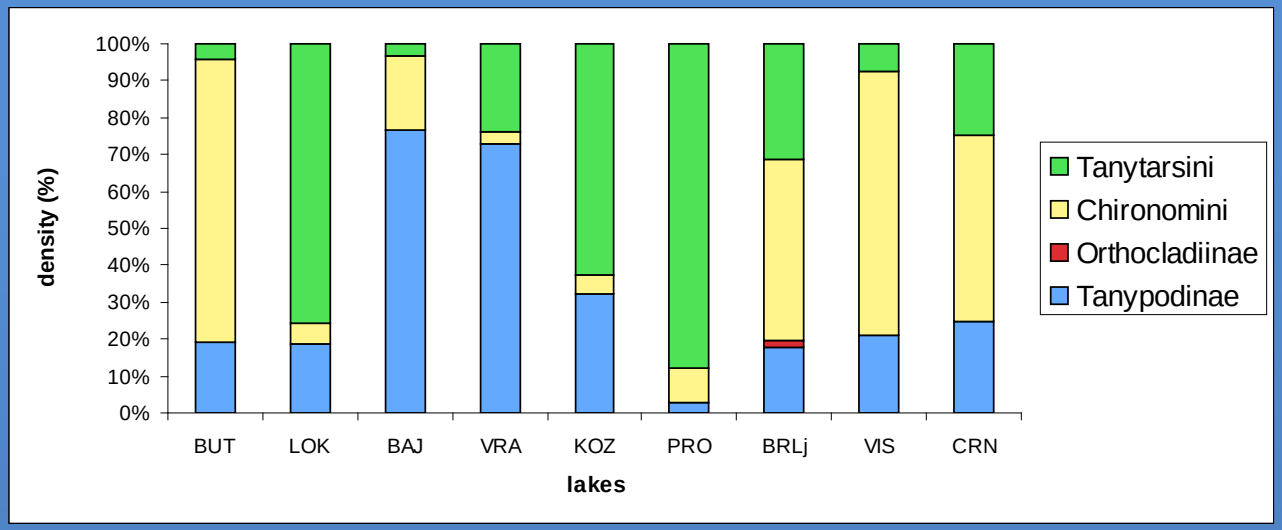

+7.0
-2.0
-2.5
+2.5
12
VRN-2
Con
CRN-P
48
COD
N-tot
Dep
VRA-P
VIS-P
pH
PRO-P
PRO-L
VRN-1
W Tem Ma
P-tot
PON-L
TRI
BUT-L
BUT-P
LOK-P
LOK-L
BAJ-P
BAJ-L
VIS-L
KOZ-L
Oxy Min



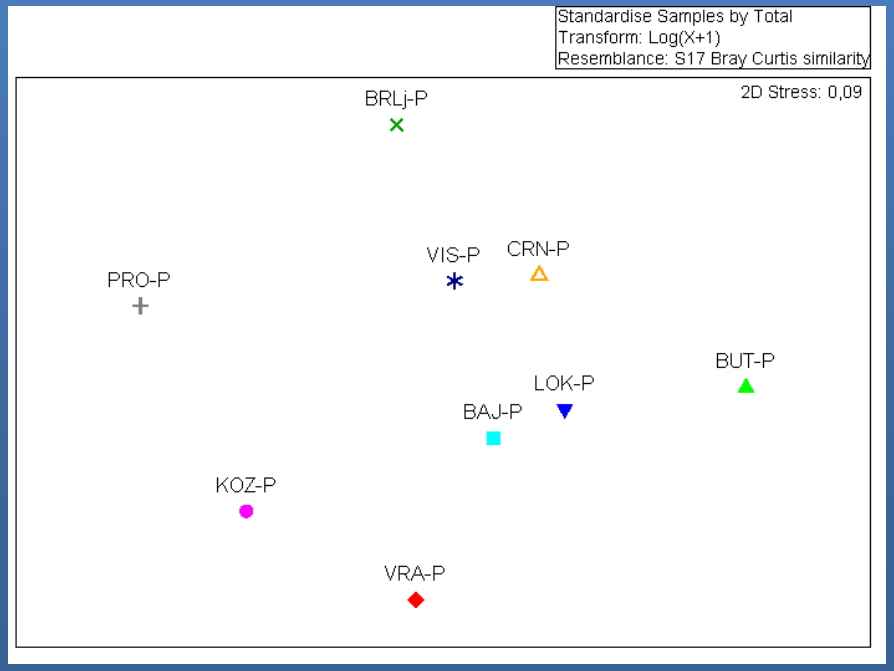
Sastav zajednice hironomida u litoralu / sublittoralu istraživanih jezera



Sličnost istraživanih jezera temeljem zajednica hironomida u litoralu / sublitoralu



Sastav zajednice hironomida u profundalu istraživanih jezera



Sličnost istraživanih jezera temeljem zajednica hironomida u profundalu

	BUT-P	BUT-L	LOK-P	LOK-L	BAJ-P	BAJ-L	TRI	PON	VRA-P	VRA-L	KOZ-P	KOZ-L	PRO-P	PRO-L	VRN-1	VRN-2	BRLj-P	BRLJ-L	VIS-P	ViS-L	CRN-P	CRN-L
1 *Ablabesmia monilis*	0	9	30	67	15	104	0	5	0	8	0	15	0	0	2	38	0	2	0	15	0	3
2 *Conhapelopia* agg.	0	0	0	0	0	0	0	0	3	17	0	0	0	0	2	0	77	0	80	20	0	3
3 *Guttipelopia guttipennis*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0
4 *Thienemanimyia pseudocarnea*	0	0	0	0	0	0	0	0	0	0	0	30	0	2124	0	0	0	0	0	0	0	0
5 *Procladius* sp.	9	444	667	356	2051	1260	1570	185	272	138	244	30	5	0	352	60	241	2632	238	275	33	555
6 *Tanypus punctipennis*	9	18	0	0	0	59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7 *Corynoneura* sp.	0	13	0	0	0	15	0	10	0	3	0	3	0	0	0	0	28	0	0	0	0	0
8 *Prodiamesa olivacea*	0	0	30	0	0	0	0	0	0	0	0	3	0	0	0	0	295	0	0	0	0	0
9 *Psectrocladius psilopterus*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35	0	0	0	0	2	0	0
10 *Epoicocladius ephemerae*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	2	0	0
11 Orthocladiinae	0	0	0	0	0	15	8	0	0	5	0	1254	0	5570	0	0	2	605	0	275	0	0
12 *Chironomus aprilinus*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1028	0	0	0	0	30	0
13 *Chironomus commutatus*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	791	0	0	0	0
14 *Chironomus luridus* agg.	0	0	0	0	0	0	0	0	0	0	0	310	0	47	0	0	0	0	0	0	0	0
15 *Chironomus nuditarsis*	58	120	0	978	0	0	0	1178	0	0	0	0	0	0	41	0	0	0	0	0	0	0
16 *Chironomus plumosus*	0	0	0	0	30	74	93	0	0	5	0	0	13	0	0	0	715	0	1092	0	23	0
17 *Cladopelma* gr. *laccophila*	0	0	0	0	0	148	97	0	0	13	0	0	0	0	4	0	0	0	0	0	0	59
18 *Cladopelma* gr. *lateralis*	4	133	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	2	10	0	0
19 *Cladotanytarsus* sp.	0	0	0	0	59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	167	0	0
20 *Cryptochironomus defectus*	9	13	0	22	15	30	0	5	5	5	0	0	0	0	78	0	0	0	0	185	4	13
21 *Cryptochironomus* sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0
22 *Cryptotendipes* sp.	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0	60	1480	0	0	0	0
23 *Constempellina brevicosta*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0
24 *Dicrotendipes* gr. *lobiger*	0	0	0	0	0	119	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25 *Dicrotendipes* gr. *nervosus*	0	4	0	2933	0	0	0	965	5	0	22	0	0	0	1	0	0	0	2	2	0	0
26 *Einfeldia* gr. *pagana*	0	0	0	0	222	2260	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27 *Endochironomus albipennis*	0	0	0	133	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28 *Endochironomus* gr. *dispar*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0
29 *Harnischia* sp.	0	0	0	0	0	0	52	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0
30 *Microchironomus tener*	0	4	0	0	0	0	0	0	3	5	0	0	0	0	33	0	0	0	0	0	0	0
31 *Micropsectra contracta* type	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	558	44	0	0	0	0
32 *Micropsectra insignilobus* type	0	0	0	0	0	0	0	0	0	140	0	0	0	0	0	0	0	0	0	0	0	0
33 *Microtendipes pedellus/ chloris*	0	0	0	89	15	22	0	0	0	0	0	0	0	0	2	0	38	15	2	132	0	49
34 *Micrtendipes rydalensis*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	0	0	0	0
35 *Paracladopelma* gr. *camptolabis-laminata*	0	0	0	0	0	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0
36 *Parachironomus* gr. *arcuatus*	0	9	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	90	0	0
37 *Paratanytarsus* sp.	0	0	0	0	0	0	1880	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
38 *Paratanytarsus lauterborni*	0	0	0	0	0	0	0	0	0	0	0	60	0	252	0	0	0	22	0	855	0	7
39 *Paratendipes abimanus*	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	592	0	0	0	0
40 *Phaenopsectra* sp.	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0
41 *Polypedilum* gr. *laetum*	0	0	0	0	0	0	0	18	0	0	0	0	0	0	0	0	0	0	0	22	0	0
42 *Polypedilum* gr. *nubeculosum*	0	13	207	178	207	89	15	0	0	0	0	0	3	0	0	0	36	7	0	2	0	0
43 *Polypedilum* gr. *bicrenatum*	0	0	0	0	0	0	0	0	0	42	0	0	0	0	0	0	15	15	2	50	11	103
44 *Stictochironomus* sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	153	0	0
45 *Tanytarsus mendax* type	4	49	2785	222	89	222	627	0	0	0	0	0	0	0	7	0	0	51	111	429	33	8
46 *Tanytarsus nemorosus* type	0	0	0	0	0	0	0	2250	0	0	0	0	0	0	0	0	0	0	0	0	0	0
47 *Tanytarsus glabrescens* type	0	0	0	0	0	0	0	0	89	0	0	0	0	0	0	0	0	0	0	0	0	0
48 *Tanytarsus* sp. 1	0	0	0	0	0	0	0	0	0	0	474	0	152	15	0	0	0	0	0	0	0	0
49 *Tanytarsus* sp. 2	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0
TOTAL	93	829	3718	4977	2703	4446	4342	4636	377	381	755	1708	176	8011	563	1126	2076	6287	1529	2692	134	800

Hvala na pažnji!