RESEARCH REGARDING THE STRUCTURE AND DYNAMICS OF BENTHIC COMMUNITIES OF SAPROBIONTS FROM THE BEGA RIVER

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Introduction

Macro invertebrates organism:

- have a fairly long-lasting lifecycle,
- are present in all types of aquatic ecosystems,
- are easily collected and quite easy to identify
- live in constant contact with the sediments where pollutants are accumulated

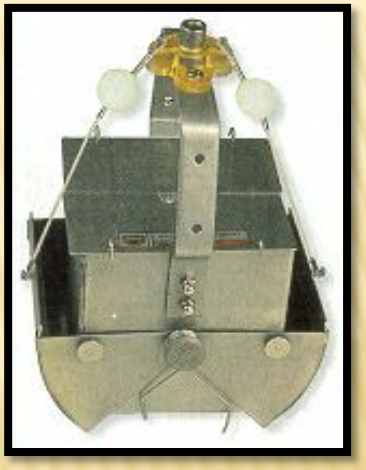
The present study follows to show the changes than appear in the structure and dynamics of benthic community of saprobionts from the Bega River due the human impact in various forms

Sensitive to pollution

Tolerances to pollution

Material and Methods

- **Sampling period**
  April 2014 - February 2015
  4 station
- **No. of samples**
  5 / station
- **Ekman-sampler**.



Study area


S1
S2
S3
S4
Dumbrăvița
Cărpiniș
Beregsău Mare
Uzina de Apă Rona
Timișoara
Centrala hidroelectrică
Uzina de apa
Mosnița Veche
Uzina de apă Urseni
Cenei
Utvin
Sânmihaiu Român
Giroc
Urseni
Uliuc
Uivar
Șag
Parța
Sânmărtinu Sârbesc
Peciu Nou
Pădureni
Liebling
Ivanda
Jebel
69
6
591
595
592
E70
59B
591A
593
593A
195

RESULTS AND DISCUSSION

Groups	Station 1 (S1)	Station 2 (S2)	Station 3 (S3)	Station 4 (S4)
Oligochaeta	x	x	x	x
Hirudinea			x	
Lamelibranchiata	x	x		
Gastropoda	x	x		x
Nematoda	x	x		x
Chironomidae	x	x	x	x
Ceratopogonidae	x	x		x
Tipulidae			x	x
Isopodae			x	
Trichoptera				x
Odonata	x			
Coleoptera	x			

X= the presence

Statistical indices

- **the density (*Di = ni / Sp*),**

- **the abundance (*A = (ni / N) * 100*)**

- **the frequency (*F = Ni * 100 / Np*),**

_ni_ represents the total number of individuals for the _i_ series,

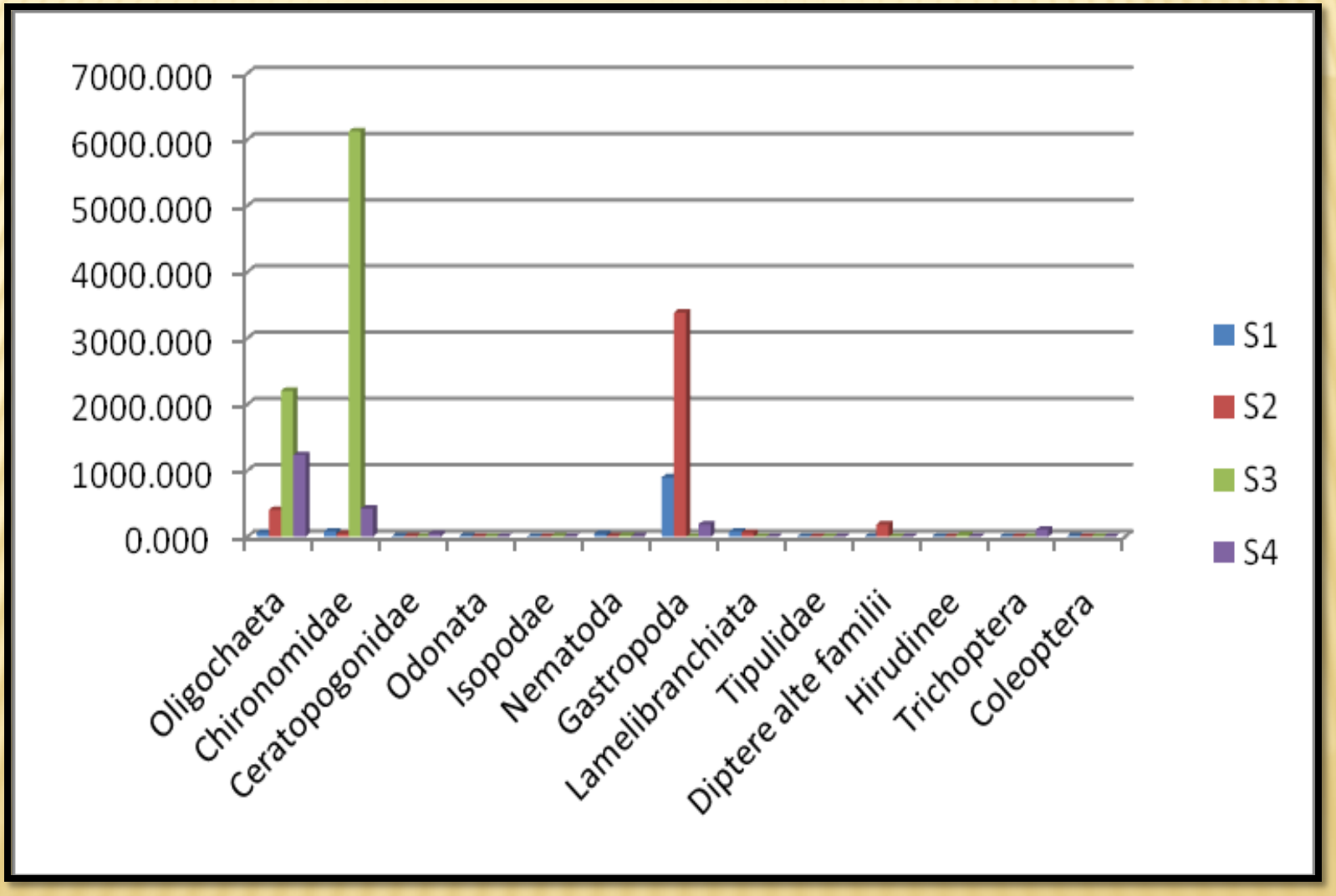
_Sp_ - the total researched area,

_N_ - the total number of individuals belonging to all species (from the sample or the studied samples),

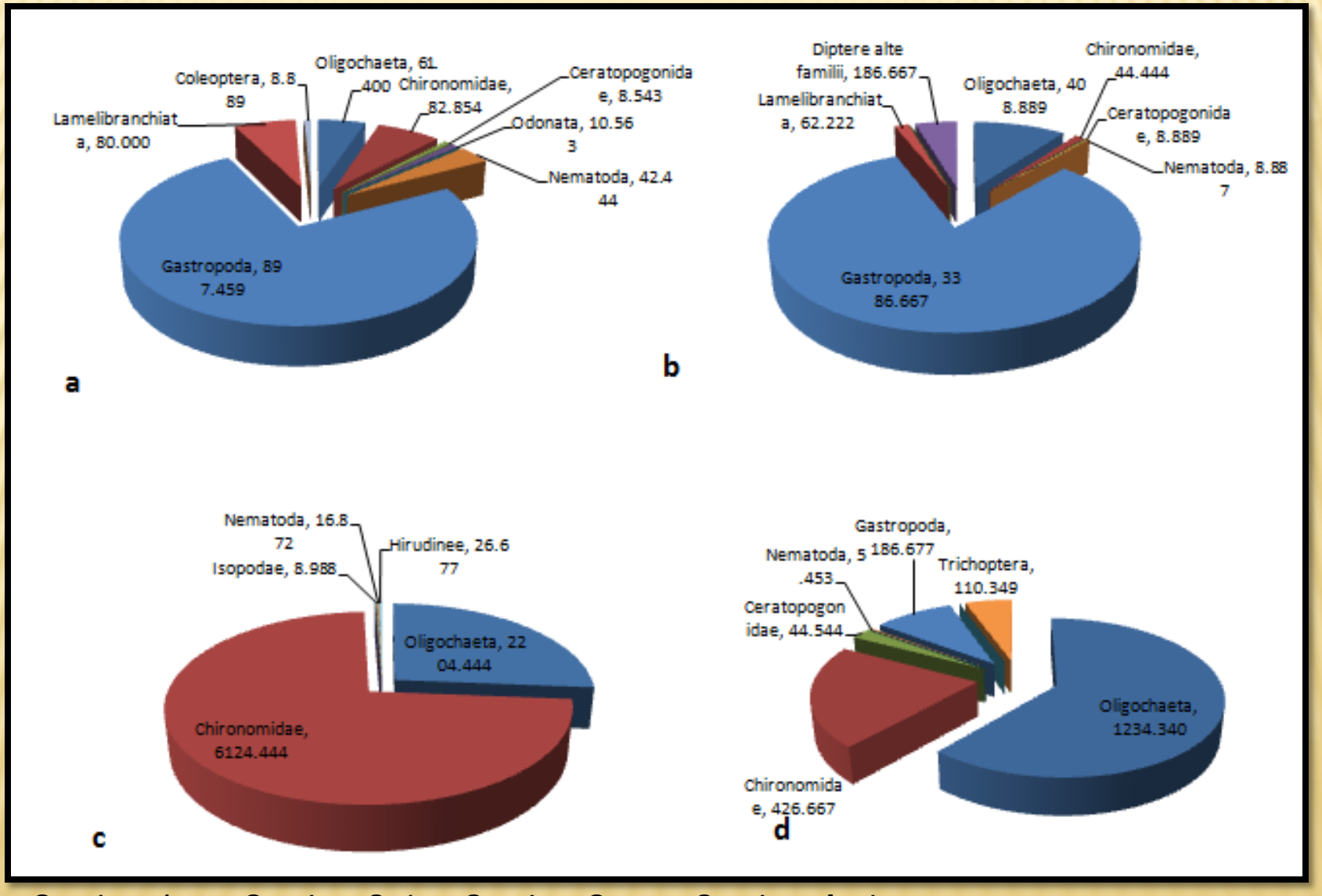
_Ni_ - the number of stations within which been identified the subjected species,

_Np_ - the total number of stations

Macro invertebrate's density (ind/m^2) from Bega River

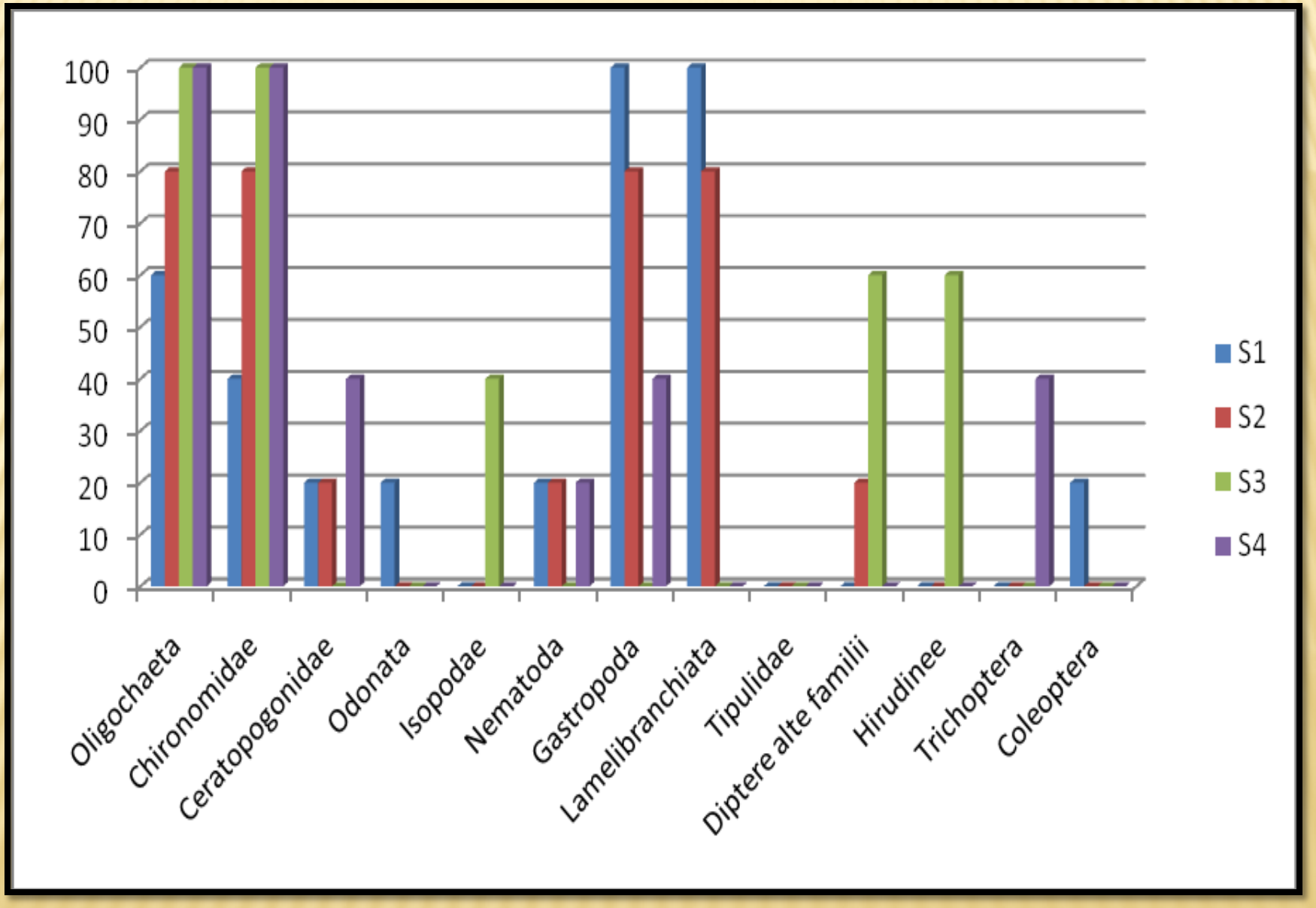


The numerical abundance of the macro invertebrates groups

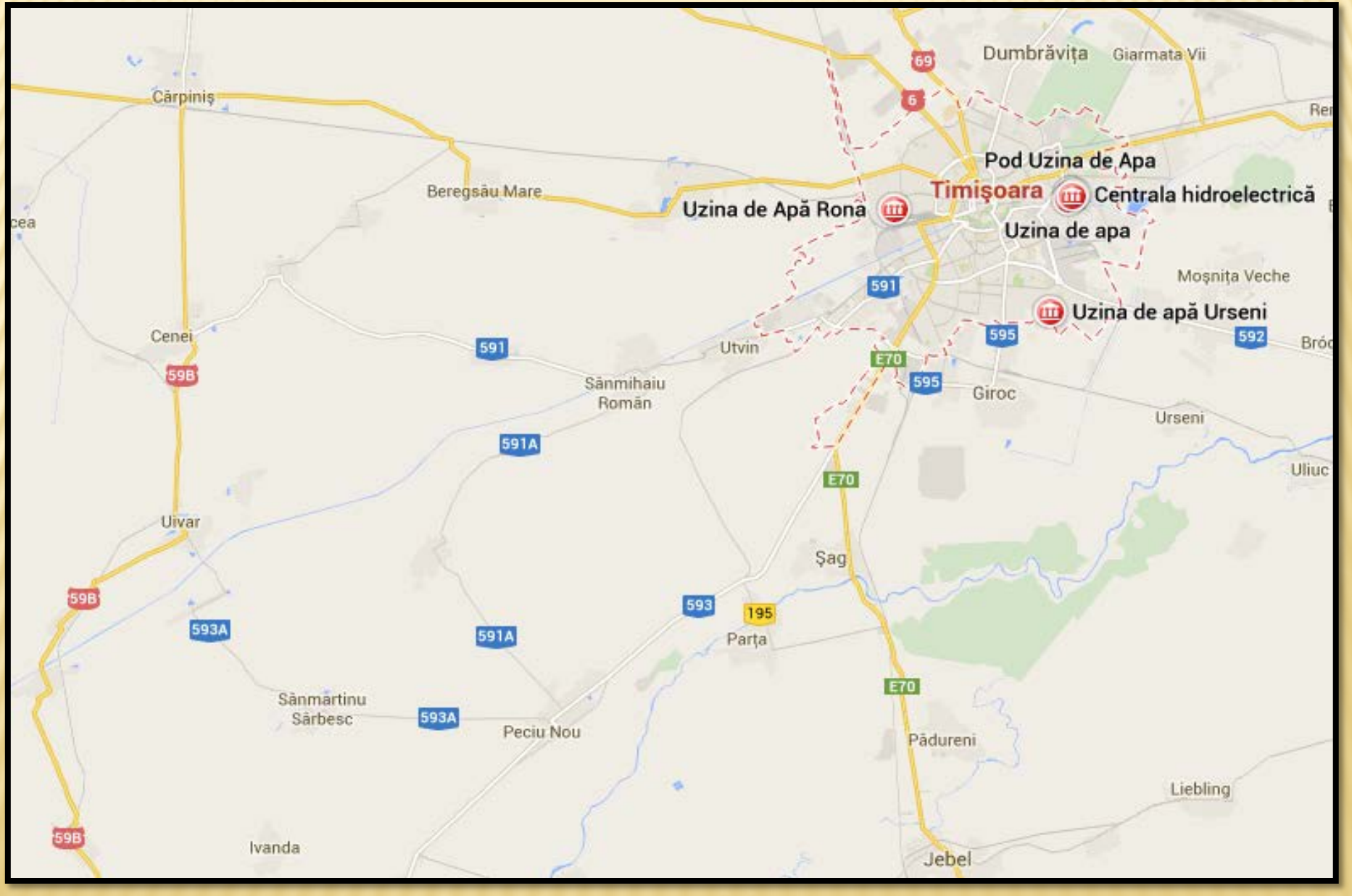


Station 1- a, Station 2- b, Station 3 – c, Station 4- d

Macro invertebrate's frequency in the Bega River (%).



CONCLUSIONS



Regarding the structure and dynamics of benthic communities of saprobionts from the Bega River

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