

علوم و تکنولوژی محیط زیست ، شماره ۲۶ ، پاییز ۸۴

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COD BOD

EC DO

cm²

cm²

Patrick and

90

Reimer

Cocconeis Navicula Diatoma Cymbella



%

%

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SPSS Ver.12

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(DO)

(DO)

(Dissolved Oxygen)

(Electrical Conductivity)

Multimeters

Consort 535

mg/L

l mg/L

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cm²

cm²

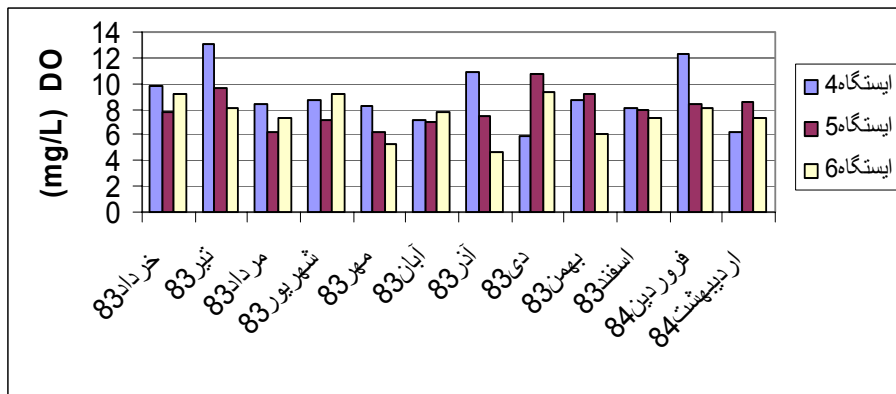
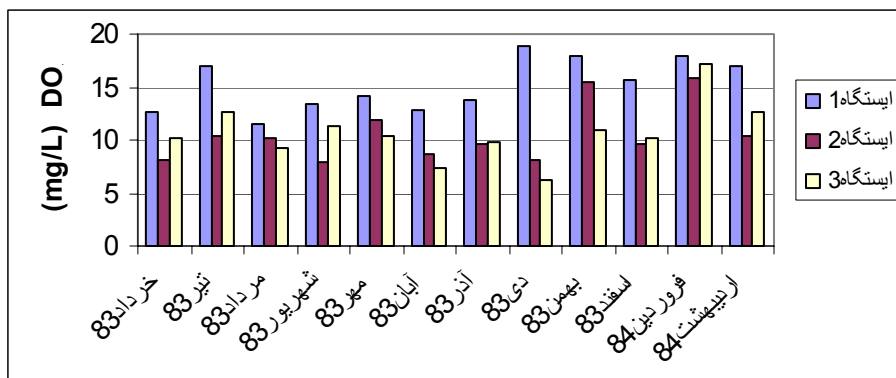
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- 1- Biological Oxygen Demand
 - 2- Oxygen Demand Chemical



(mg/L)

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DO :

(EC)

µs/cm

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µs/cm

µs/cm

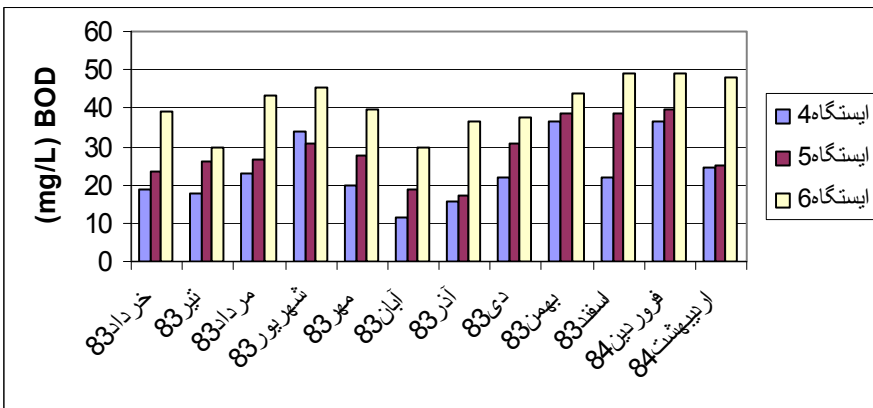
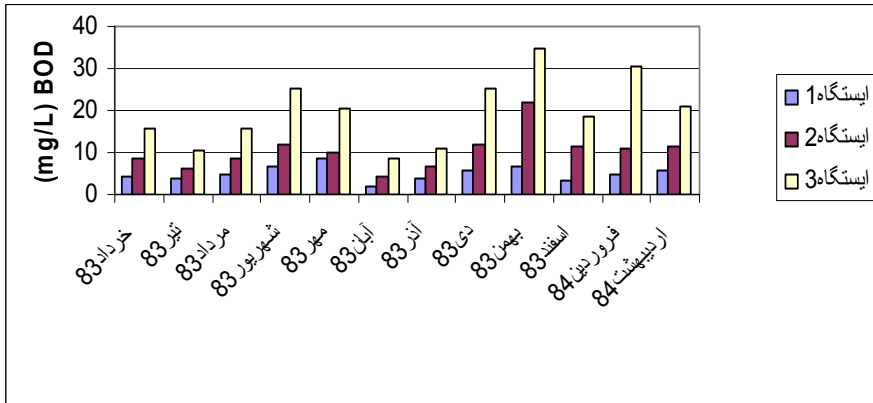
µs/cm



(mg/L)

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BOD :

(COD)

/ mg/L

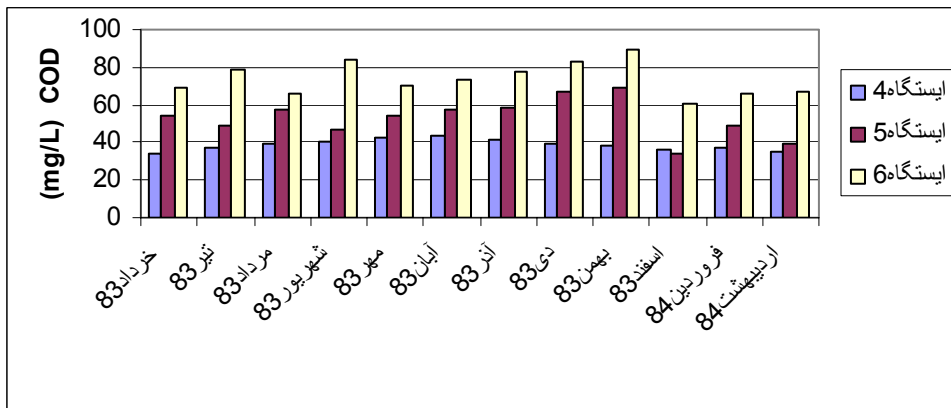
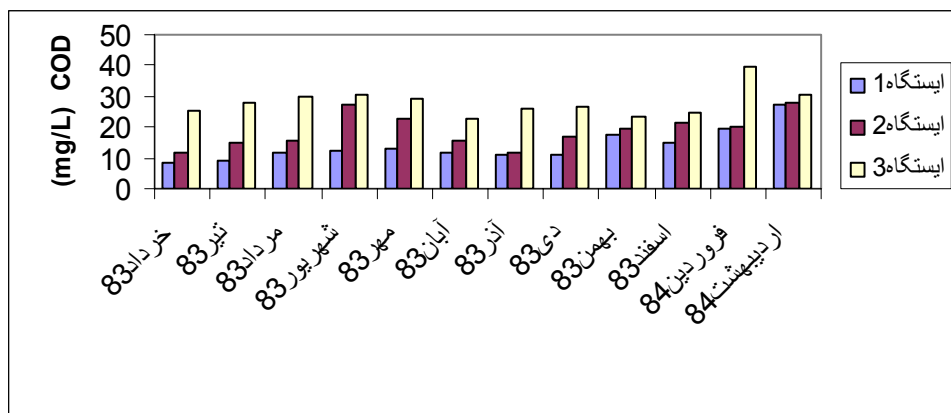
/ mg/L

.()

(mg/L)

COD :

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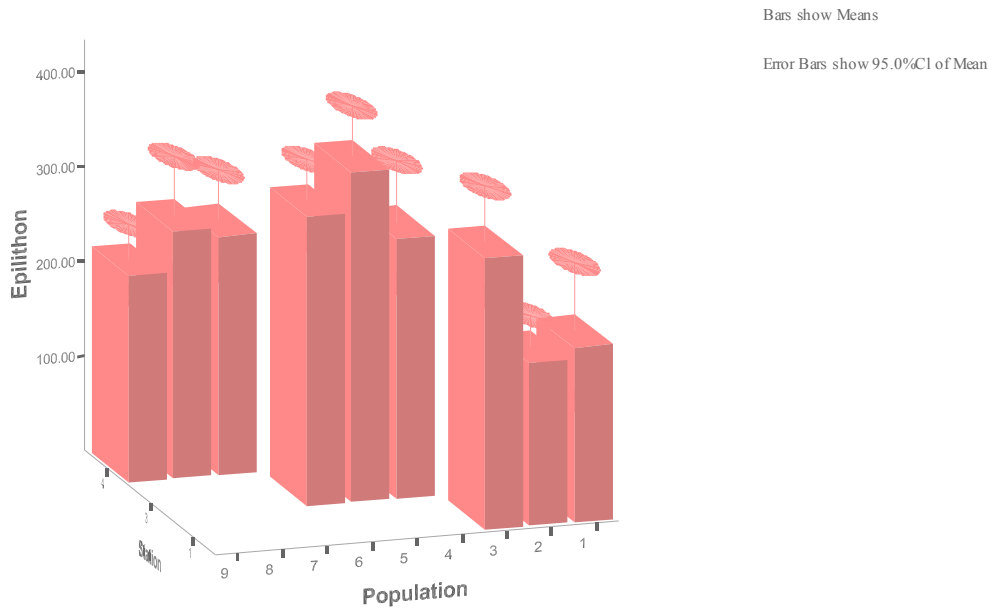
<i>Achnanthes clevei</i> Grun.	+		
<i>Achnanthes deflexa</i> Reim.	+	+	
<i>Achnanthes lanceolata</i> Var. <i>dubia</i> Grun.	+		+
<i>Achnanthes linearis</i> (W.Sm.) Grun.		+	+
<i>Achnanthes pseadowazi</i> Carter.	+	+	
<i>Achnanthidium delicatulum</i> Kutz.			+
<i>Achnanthidium lanceolatum</i> Berb.		+	+
<i>Achnanthidium minutissima</i> Kutz.	+		+
<i>Amphora coffeiformis</i> (Ag.) Kutz.			+
<i>Amphora ovalis</i> (Kutz.) Kutz.	+	+	
<i>Amphora ovalis</i> Var. <i>affinis</i> (Kutz.) V. H.ex De T.	+	+	
<i>Amphora ovalis</i> Var. <i>pediculus</i> (Kutz.) V. H.ex De T.	+	+	
<i>Amphora perpusilla</i> (Grun.) Grun.		+	+
<i>Bacillaria paradoxa</i> Gmelin.	+		
<i>Cocconeis fluviatilis</i> Wallace.	+	+	+
<i>Cocconeis klamathensis</i> Sov.		+	+
<i>Cocconeis rugosa</i> Sov.	+	+	+
<i>Cocconeis pediculus</i> Ehr.			+
<i>Cocconeis placentula</i> Ehr.	+		+
<i>Cocconeis placentula</i> Var. <i>euglypta</i> (Ehr.) Cl.			+
<i>Cymatopleura solea</i> (Berb.) W. Smith.		+	
<i>Cymbella affinis</i> Kutz.	+		+
<i>Cymbella angustata</i> (W. Sm.) Cl.		+	+
<i>Cymbella cistula</i> (Ehr.) Kirch.	+	+	
<i>Cymbella cistula</i> Var. <i>gibbosa</i> Brun.		+	
<i>Cymbella cymbiformis</i> (Agardh.) Van Heurck.		+	+
<i>Cymbella gibba</i> J. W. Bail.	+		+
<i>Cymbella lanceolata</i> (Ag.) Ag.	+	+	+
<i>Cymbella lunata</i> W.Sm.		+	
<i>Cymbella mexicana</i> (Ehr.) Cl.		+	+
<i>Cymbella minuta</i> Hilse. ex Rabh.		+	+
<i>Cymbella prostrata</i> (Berk.) Cl.	+	+	
<i>Cymbella sinuata</i> Gerg.	+		+
<i>Diatoma anceps</i> (Ehr.) Kirch.		+	+
<i>Diatoma ehrenbergii</i> Kutz.	+	+	+
<i>Diatoma mesodon</i> (Ehr.) Kutz.	+	+	+
<i>Diatoma tenue</i> C. A. Agardh.			+
<i>Diatoma vulgare</i> Var. <i>breve</i> Grun.	+		
<i>Diatoma vulgare</i> Var. <i>linearis</i> V. H.		+	
<i>Diatoma vulgare</i> Bory.	+		+
<i>Didymosphenia geminate</i> (Lyng.) M. Schmidt.		+	+
<i>Diploneis elliptica</i> (Kutz.) Cl.	+		+
<i>Gomphonema affine</i> Var. <i>insign</i> (Gerg.) Andrews.			+
<i>Gomphonema angustatum</i> (Kutz.) Rabh.	+		+
<i>Gomphonema olivaceoides</i> Hust.			
<i>Gomphonema olivaceum</i> (Lyng.) Kutz.	+		+

<i>Gomphonema subclavatum</i> (Groun.) Groun.	+		+
<i>Gomphonema subclavatum</i> Var. <i>mexicanum</i> (Groun.) Patr.		+	+
<i>Gomphonema tenellum</i> Kutz.	+		+
<i>Hantzschia pseudomarina</i> Hust.			+
<i>Hannaea arcus</i> (Ehr.) Patr.	+	+	
<i>Melosira varians</i> Agardh.	+	+	+
<i>Navicula angusta</i> Groun.		+	
<i>Navicula capitata</i> Ehr.	+	+	
<i>Navicula circumtexta</i> Meist. ex Hust.		+	+
<i>Navicula cryptocephala</i> Kutz.	+	+	+
<i>Navicula gibbosa</i> Hust.	+		
<i>Navicula halophila</i> (Grun.) Cl.		+	
<i>Navicula inflexa</i> (Greg.) Ralfs.			+
<i>Navicula insignita</i> Hust.	+	+	
<i>Navicula lanceolata</i> (Ag.) Kutz.	+	+	
<i>Navicula mutica</i> kutz.	+		
<i>Navicula placentula</i> (Ehr.) Kutz.			+
<i>Navicula rhynchocephala</i> Kutz.	+		
<i>Navicula salinarum</i> Grun.	+	+	
<i>Navicula tripunctata</i> (O. F. Mull.) Bory.			+
<i>Navicula viridula</i> (Kutz.) Kutz.	+		+
<i>Nitzschia acuta</i> Hantz.		+	
<i>Nitzschia angustata</i> (W. Smith.) Grun.	+	+	
<i>Nitzschia dissipata</i> (Kutz.) Grun.	+	+	+
<i>Nitzschia flexa</i> Schum.	+		
<i>Nitzschia linearis</i> W. Smith.		+	+
<i>Nitzschia recta</i> Hantz. ex Raben.	+		
<i>Nitzschia sigma</i> (Kutz.) W. Smith.	+		+
<i>Nitzschia sigmoidea</i> (Ehr.) W. Smith.	+		
<i>Nitzschia sublinearis</i> Hust.	+		+
<i>Nitzschia thermalis</i> Kutz.		+	+
<i>Nitzschia vermicularis</i> (Kutz.) Grun.	+		+
<i>Peronia intermedium</i> (H. L. Sm.) Part.	+	+	
<i>Stephanodiscus neoastraea</i> Hakan. and Hick.		+	+
<i>Surirella angustata</i> Kutz.	+	+	+
<i>Surirella linearis</i> W. M. Smith.		+	+
<i>Surirella ovalis</i> Berb.		+	
<i>Surirella ovata</i> Kutz.		+	
<i>Surirella robusta</i> Var. <i>splendida</i> (Ehr.) Van Heurck.	+		
<i>Surirella tenuis</i> Mayer.		+	
<i>Synedra acus</i> Kutz.			+
<i>Synedra capitata</i> Ehr.		+	
<i>Synedra ulna</i> (Nitz.) Ehr.	+		+
<i>Tetracyclus rupestris</i> (Braun.) Grun.		+	+

Diatoma vulgare

Cymbella affinis

Cymbella lanceolata

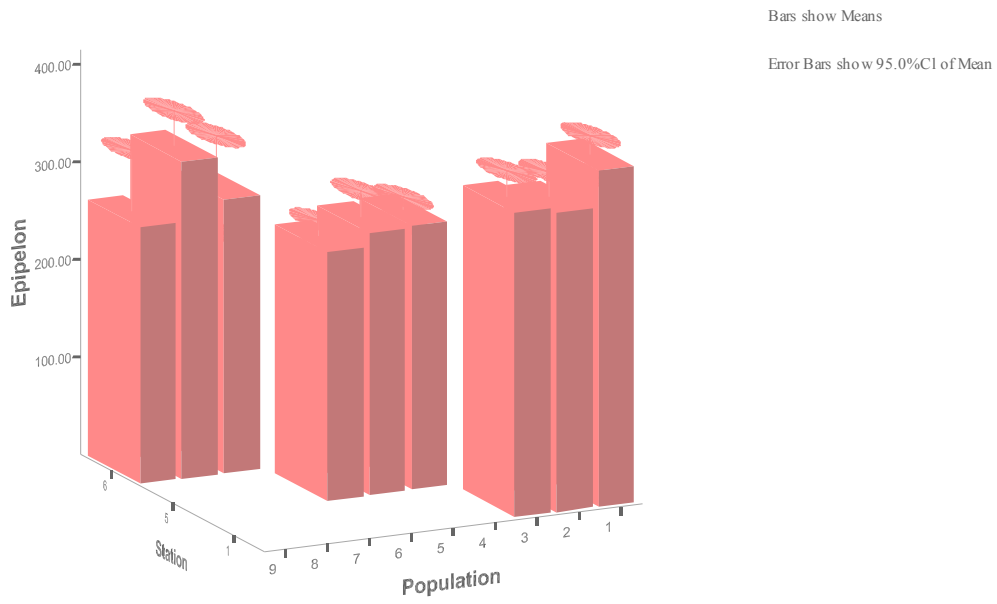


: *Cymbella affinis* :
(: ...) *Diatoma vulgaris* : *Cymbella lanceolata*

Navicula circumtexta

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Cymbella angustata
Cocconeis fluviatilis



: *Cymbella angustata* :

(: ...) *Navicula circumtexta* : *Cocconeis fluviatilis*

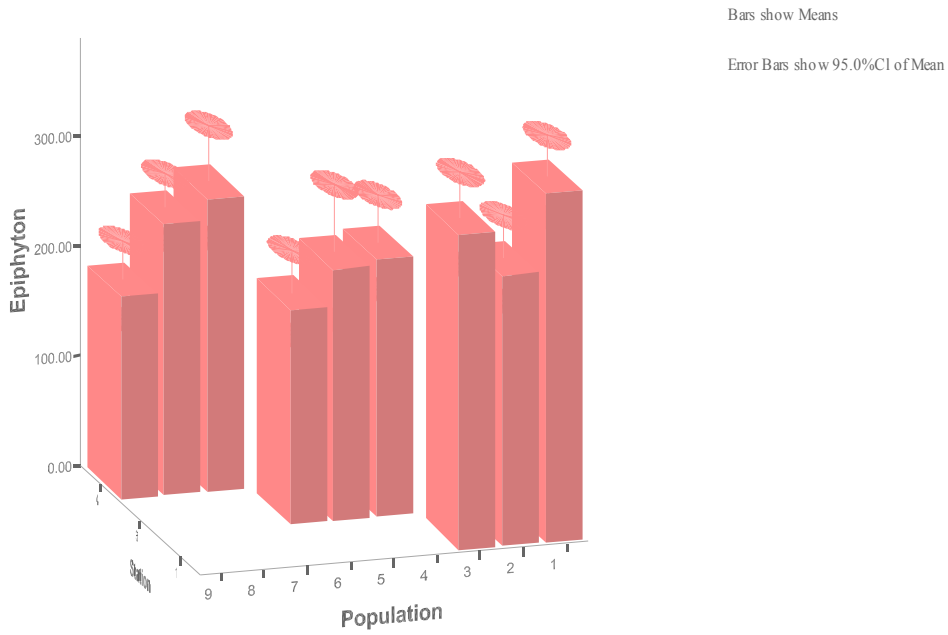
Diatoma vulgare

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Cymbella minuta

Cymbella angustata



: *Cymbella minuta* :
 (: ...) *Diatoma vulgaris* : *Cymbella angustata*

() Sig (ANOVA)

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((a=)

(ANOVA) :

<i>Sig.</i>	<i>F</i>	<i>Mean Square</i>	<i>df</i>	<i>Type III Sum of Squares</i>	<i>Source</i>
.	/	2/0E+08	21	1/8E+07 ^a	<i>Corrected Model</i>
.	/	2/1E+09	1	2/1E+08	<i>Intercept</i>
.	/	1/0.1E+09	12	1/2E+07	<i>Date</i>
.	/	1/0.2E+07	0	0/1E+08	<i>Station</i>
.	/	1/7E+09	04	8/7E+08	<i>Date * Station</i>
		2/8E+09	1.406	4/0E+07	<i>Error</i>
			1.478	2/0E+08	<i>Total</i>
			1.477	0/8E+07	<i>Corrected Total</i>



(ANOVA) :

<i>Sig.</i>	<i>F</i>	<i>Mean Square</i>	<i>df</i>	<i>Type III Sum of Squares</i>	<i>Source</i>
.	/	/ E+		/ E+ ^a	<i>Corrected Model</i>
.	/	/ E+		/ E+	<i>Intercept</i>
.	/	/ E+		/ E+	<i>Date</i>
.	/	/ E+		/ E+	<i>Station</i>
.	/	/ E+		/ E+	<i>Date * Station</i>
		/ E+		/ E+	<i>Error</i>
				/ E+	<i>Total</i>
				/ E+	<i>Corrected Total</i>

(ANOVA) :

<i>Sig.</i>	<i>F</i>	<i>Mean Square</i>	<i>df</i>	<i>Type III Sum of Squares</i>	<i>Source</i>
.	/	/ E+		/ E+ ^a	<i>Corrected Model</i>
.	/	/ E+		/ E+	<i>Intercept</i>
.	/	/ E+		/ E+	<i>Date</i>
.	/	/ E+		/ E+	<i>Station</i>
.	.	/ E+		/ E+	<i>Date * Station</i>
		/ E+		/ E+	<i>Error</i>
				/ E+	<i>Total</i>
				/ E+	<i>Corrected Total</i>

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Poulickova and Duckoslav Gomez

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