Use of SCN features: No

Max learning objects: 200 objects/class Strategy N° 11

## Gulf Selected Samples prediction using Gulf training set, Learning with all classes present in the selected samples, with extra training categories, With Calanoida, Cyclopoida and Zooplankton classes in learning set

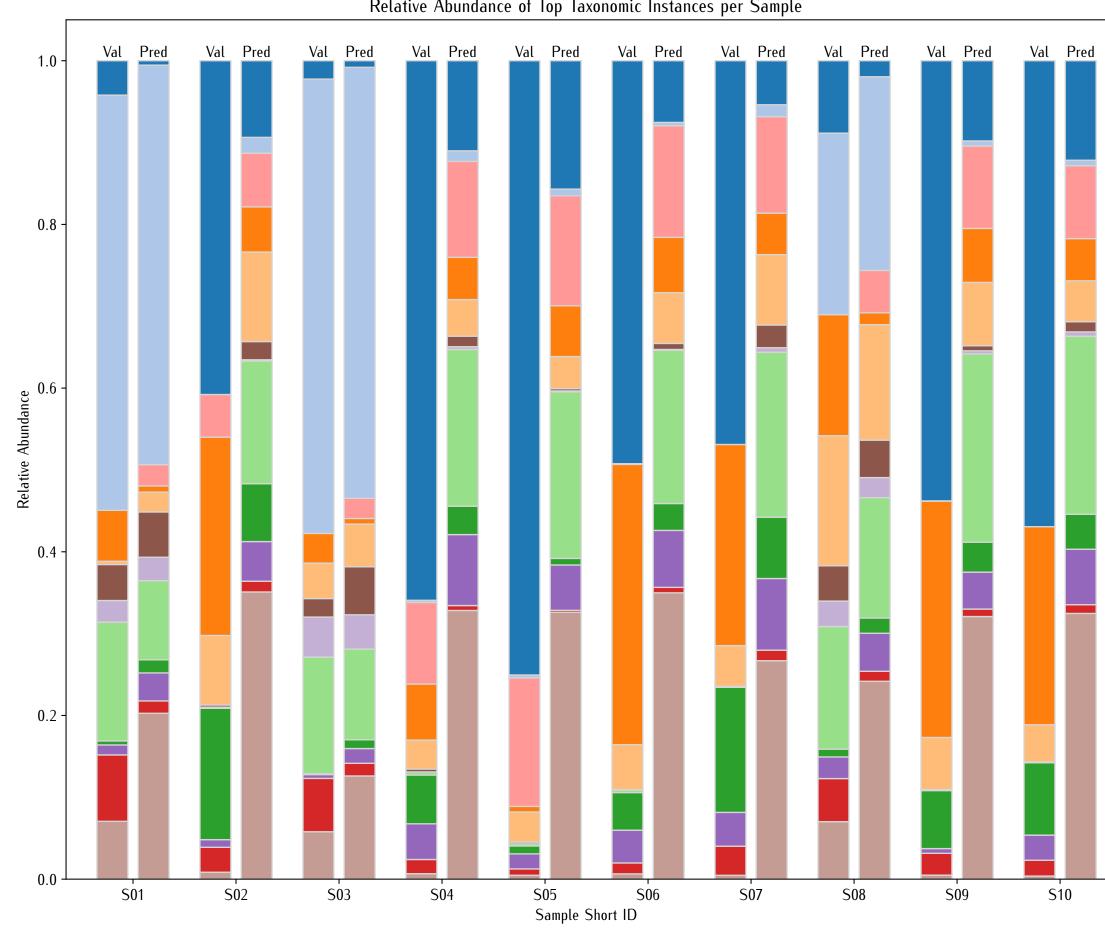
														Co	nfu	sion	Ma	trix	– In	pe	rce	ent of	Act	tual	l Value										
Acartia spp.	18%		8%	<1%	<1%	29%	<1%	4%	5%	< 19	% <1 <sup>9</sup>	6 2%	s <1 <sup>9</sup>	k <19	% <1	1% 4%	1%	i  <'	1% <1	% <	1%	<1% 2	.% <	(1%	3% <1%	<1%	<1% <1%	<1%		}% <	<1%	14% <1%		<1%	4%
Bivalvia (larvae)		90%	<1%	<1%	<1%	<1%	<1%	% <1 <sup>9</sup>	6 <1	% 1%	5%		<19	% <1 <sup>9</sup>	% <1	1% <19	%	<	1% <1	%		<1% <	1%		<1%	j	<1%						<1%		
Calanoida (unid)	<1%	<1%	6%	3%	<1%	12%	<1%	30%	129	% <1º	% <1 <sup>9</sup>	6 <1	% 4%	<19	% <1	1% 8%	<1	% 5	% 5%	6 <	1%	2% 5	% <	(1% <	<1% <1%		2% <1%		<	1% <	<1%	<1% <1%	<1%	<1%	<1%
Copepoda (nauplii)		2%		78%	<1%		2%	<19	<sub>6</sub> <1	%	<19	ó	5%	3%		<15	%	3	% 3%	6		2%					<1%						<1%		
Podon/Pleopsis spp.		5%	<1%	13%	45%	<1%	3%	<19	<sub>6</sub> <1	% 2%	12%	<1	% 9%	4%		<15	%	<	1%	<	1%	4% <	1%		<1%	<1%	<1%		<	(1%		<1% <1%			<1%
Oithona spp.	<1%		2%	<1%	<1%	69%		6%	6%	i			<19	%	<1	1% 9%		2	% 3%	6		<1% 1	%	<	<1%		1%	<1%				<1%	<1%		<1%
Zooplankton (unid)		29%	<1%	15%	6%	<1%	13%	5 2%	<1	% 3%	9%	<1	% 15%	5 2%	<1	1% <19	%	1	% <1	%		2% <	1%		<1%		<1%		<1%			<1%			
Calanoida (ci-ciii)			5%	2%	1%	8%	<1%	34%	109	% <1º	% <1 <sup>9</sup>	ó	4%	<19	%	119	б	4	% 6%	6		4% 8	%		<1%	i	2%						<1%		
Pseudodiaptomus spp.	<1%		1%	<1%	<1%	15%		12%	379	6	<19	6 <1	% <19	6		16%	6 <1	% 4	% 6%	6		<1% 2	%	<	<1% <1%		<1%		<	(1%		2%			<1%
Hydrozoa (medusa)		2%	<1%		4%	1%	<1%	6	<1	% 66%	7%	<1	% 3%	<19	%	<15	%	<	1% <1	% 4	1%	1% 5	%	<	<1%		<1%		<1% <	1%		<1%		<1%	<1%
Gastropoda (larvae/Limacina)		15%		7%	9%		3%	<19	ó	2%	53%	5	3%	2%		<1	%					1% <	1%	<	<1% 1%				<1%						
Temora spp.	<1%		2%	<1%	<1%	1%		7%	139	6		199	% 4%			4%	6%	4	% 4%	6		2% 7	%		6% <1%	i			6	j% <	<1%	5% <1%		4%	<1%
Bryozoa (larvae)		<1%		15%	13%	<1%	4%	<19	ó		5%		56%	2%		<15	%		2%	6		<1%					<1%		<	(1%					
Polychaeta (larvae)	<1%	<1%	1%	14%	4%	<1%	<1%	3%	1%	i	<19	б	1%	48%	ó	1%		7	% <1	% <	1%	5% 5	%			<1%	2%			<	<1%	<1%			
Ascidiacea (larvae)	<1%					2%			<1	%			<19	6	90	% 2%							<	(1%			<1%				4%				
Harpacticoida- epibenthic	<1%			2%		10%		12%	5%	5		<1	% 4%			44%	б	<	1% 129	%		<1%	1%	<	<1% <1%	<1%			<	(1%		2%	<1%		
Centropages spp.	20%					39%			2%	i		119	%			2%	119	6							7%				2	2%		5%			
Echinodermata (larvae)				3%	3%	3%		8%	3%	5			3%	3%				30	)%			24% 1	<b>5</b> %				3%								3%
Cyclopoida (unid)				9%							4%		9%			179	ó	4	% 529	%													4%		
Obelia spp. (medusa)			5%			24%				10%	ó					5%				19	9%	5% 29	9%											5%	
Cirripedia (larvae)				31%	6%									12%	ó			25	5%			25%													
Evadne spp.													12%	ó				6	%			6% 62	2%						6	6%		6%			
Chaetognatha						8%									89	%				8	8%		4	6%			8%	8%		1	15%				
Pseudocalanus spp.	29%											149	%											•	29%				1	4%				14%	
Cnidaria (larvae)				29%				29%														14%			29%										
Decapoda-non brachyura (larvae)																										50%				2	25%			25%	<u>б</u>
Fritillaria spp.						33%																					67%								
Oikopleura spp.								50%																			50%								
Monstrillidae																												100%							
Ostracoda										1009	%																								
Paracalanus spp.																													10	00%					
Osteichthyes (larvae)																																		100	%
Eurytemora spp.												100	%																						
Decapoda-brachyura (zoeae)																																		100	%
Microsetella spp.									100																										
	Aca)	Bivally Spp.	Calar (lar	Cope Toids (Cope)	Podd (Inid)	Oith Pleat	Sona Sol	Dolankto. Do	Anoida (unit	Audodial (ci.ciii)	Cas of promis	Te, tropod medus	Mora Sp. (larva	Political Collinar	Jychae (ina)	Scidiacea (lana	pactice (lange)	ntropo (	Chinodel Ges Spp. Chibenth	Iclopol Mata	Obelle (And	Ciripedi Spp. (mid)	Sadhe Marie (larve	Chaeto Spp.	PS CAID CALA	Dece Paria (la sept.	Prodo non brad	More Thyura	Ostracoe Sp.	o draca.	Ostello Manus	Curytemora Spp. (lande)	Micro Odo br	Calanus Sp. achyura (200	Sidocera Spp.
																		Pı	redict	ted	Val	lues							Vaej						Extra traini

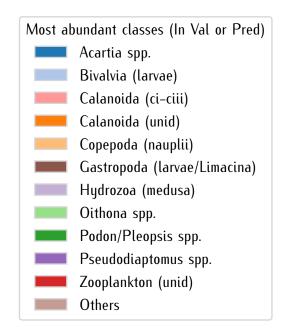
## Classification Report Matrix max 200 learning objects per class

r	nax 200 lea	rning obje	cts per class	
	precision	recall	f1-score	
Acartia spp. (n=18062-train=200)	0.98	0.18	0.30	
Bivalvia (larvae) (n=7955-train=200)	0.90	0.90	0.90	
Calanoida (unid) (n=7711-train=200)	0.23	0.06	0.10	
Copepoda (nauplii) (n=2753-train=200)	0.66	0.78	0.71	
Podon/Pleopsis spp.	0.77	0.45	0.57	
(n=2715-train=200) Oithona spp.	0.22	0.69	0.33	
(n=2572-train=200) <b>Zooplankton (unid)</b>	0.44	0.13	0.20	
(n=1822-train=200) Calanoida (ci-ciii)				
(n=1348-train=200) Pseudodiaptomus spp.	0.12	0.34	0.18	
(n=1059-train=200)	0.15	0.37	0.21	
Hydrozoa (medusa) (n=671-train=200)	0.65	0.66	0.66	
Gastropoda (larvae/Limacina) (n=629-train=200)	0.25	0.53	0.34	
Temora spp. (n=308-train=200)	0.14	0.19	0.16	
Bryozoa (larvae) (n=247-train=200)	0.11	0.56	0.18	
Polychaeta (larvae) (n=237-train=200)	0.28	0.48	0.35	
Ascidiacea (larvae)	0.63	0.90	0.74	
(n=194-train=200) Harpacticoida- epibenthic	0.02	0.44	0.04	
(n=108-train=200) Centropages spp.		0.11		
(n=44-train=200) Echinodermata (larvae)	0.02		0.03	
(n=37-train=118) Cyclopoida (unid)	0.01	0.30	0.03	
(n=23-train=64)	0.01	0.52	0.03	
Obelia spp. (medusa) (n=21-train=200)	0.03	0.19	0.05	
Cirripedia (larvae) (n=16-train=200)	0.01	0.25	0.02	
Evadne spp. (n=16-train=200)	0.01	0.62	0.02	
Chaetognatha (n=13-train=18)	0.46	0.46	0.46	
Pseudocalanus spp.	0.00	0.29	0.01	
(n=7-train=200) Cnidaria (larvae)	0.03	0.29	0.06	
(n=7-train=20) capoda-non brachyura (larvae)	0.06	0.50	0.11	
(n=4-train=197) Fritillaria spp.				
(n=3-train=200) <b>Oikopleura spp.</b>	0.00	0.67	0.01	
(n=2-train=37)  Monstrillidae	0.00	0.00	0.00	
(n=2-train=27)	0.09	1.00	0.16	
Ostracoda (n=1-train=1)	0.00	0.00	0.00	
Paracalanus spp. (n=1-train=82)	0.00	1.00	0.00	
Osteichthyes (larvae) (n=1-train=43)	0.00	0.00	0.00	
Eurytemora spp. (n=1-train=200)	0.00	0.00	0.00	
Decapoda-brachyura (zoeae)	0.00	0.00	0.00	
(n=1-train=200) Microsetella spp.	0.00	0.00	0.00	
(n=1-train=4) Calanus spp.	_			
(n=0-train=109) <b>Labidocera spp.</b>	_	_	_	
(n=0-train=200)  Tortanus spp.	_	_	-	
(n=0-train=111)	-	-	-	
macro avg (corr)	0.21	0.40	0.20	
weighted avg	0.68	0.38	0.40	
	procision	rocall	f1 ccare	

precision recall f1-score

Relative Abundance of Top Taxonomic Instances per Sample





Relative Abundance of Top Taxonomic Instances per Sample (Redistributed)

