Use of SCN features: No Max learning objects: 200 objects/class Strategy N° 5

## Gulf Selected Samples prediction using all regions training set, Learning with all classes present in the selected samples, no extra training categories, No Calanoida, Cyclopoida, Zooplankton classes in learning set

Confusion Matrix - In percent of Actual Value

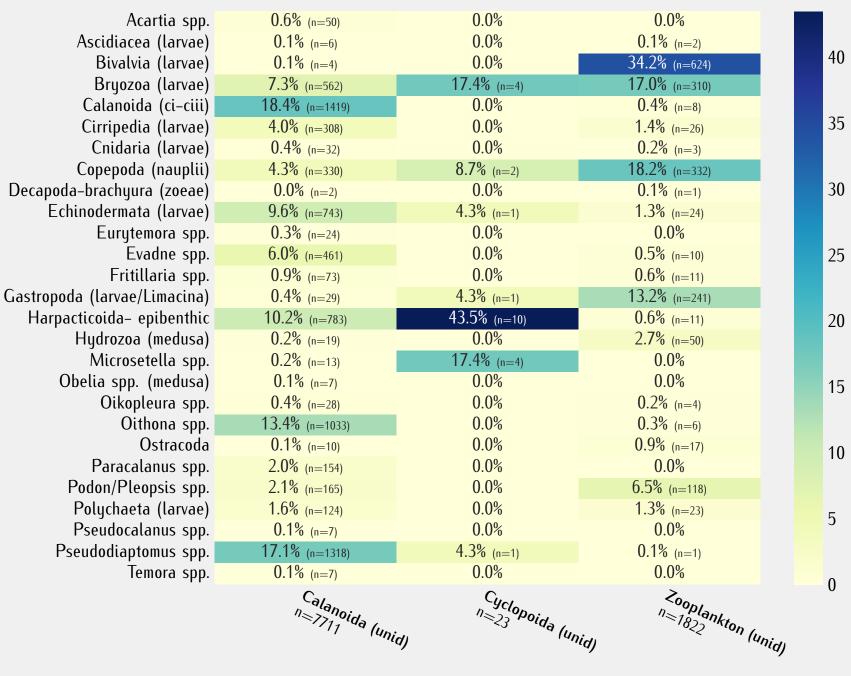
												Cont	usto	n IVIa	trix -	- In	perce	nt oi	r Actu	ıal V	alue												
Acartia spp.	19%		<1%	<1%	34%	6%	4%	<1%		<1%	<1%	<1%	<1%	5%	2%	1%	<1%	2%	<1%		<1%	<1%	<1%	<1%	<1%	<1%	<1%		<1%	12%		10%	
Bivalvia (larvae)		91%	1%	<1%	<1%	<1%	<1%	1%	5%		<1%	<1%	<1%	<1%		<1%		<1%	<1%			<1%		<1%	<1%				<1%		<1%		
Copepoda (nauplii)		4%	84%	<1%		<1%	<1%		<1%		7%	<1%		<1%		4%			1%					<1%	<1%						<1%		
Podon/Pleopsis spp.		6%	18%	43%	<1%	<1%	<1%	2%	16%	<1%	11%	<1%	<1%	<1%	<1%	<1%		<1%	<1%			<1%	<1%		<1%		<1%		<1%	<1%		<1%	
Oithona spp.	<1%		<1%	<1%	70%	3%	6%		<1%		<1%		<1%	12%		3%		1%	<1%					<1%	<1%					<1%	<1%	<1%	
Calanoida (ci-ciii)			3%	3%	9%	23%	12%	<1%	<1%		8%	3%	<1%	14%		7%		9%	5%			<1%		1%	<1%				<1%	<1%	<1%		
Pseudodiaptomus spp.	<1%		1%	<1%	16%	3%	49%				2%	1%		14%	<1%	3%		3%	2%		<1%	<1%								3%		<1%	
Hydrozoa (medusa)	<1%	2%	<1%	4%	1%			67%	6%		3%	2%		<1%		<1%	3%	5%	<1%		<1%	<1%		<1%					<1%	2%		<1%	
Gastropoda (larvae/Limacina)		16%	10%	10%		<1%	<1%	2%	52%		6%	2%		<1%				<1%	<1%			<1%							<1%				
Temora spp.	<1%		2%	<1%	2%	<1%	20%			15%	5%	3%		2%	5%	3%		7%	6%		14%	<1%					<1%			10%		4%	
Bryozoa (larvae)		2%	21%	12%	<1%	<1%			7%		53%	2%							<1%					<1%					<1%	<1%			
Polychaeta (larvae)	<1%	<1%	30%	5%	1%	1%	2%		<1%	<1%	5%	21%		<1%		11%	1%	6%	12%				<1%		<1%		<1%	<1%					
Ascidiacea (larvae)	<1%				3%		<1%				<1%	1%	89%	<1%									<1%	<1%	2%			3%					
Harpacticoida- epibenthic	<1%		5%		14%	5%	7%				2%			48%		5%		3%	<1%		<1%	<1%								3%	4%	2%	
Centropages spp.	27%				43%					7%				2%	9%															9%		2%	
Echinodermata (larvae)			5%	5%	3%						3%					32%		22%	30%														
Obelia spp. (medusa)					19%			10%			5%			5%			19%	29%	5%					5%						5%			
Evadne spp.					6%						12%							62%	12%											6%			
Cirripedia (larvae)			44%	6%					6%							6%			25%										12%				
Chaetognatha					8%								8%							31%				23%	15%			15%					
Pseudocalanus spp.	29%									29%											14%									14%		14%	
Cnidaria (larvae)			29%	14%												14%			14%			29%											
ecapoda-non brachyura (larvae)																							75%					25%					
Fritillaria spp.																								100%									
Oikopleura spp.																								100%									
Monstrillidae																								50%		50%							
Decapoda-brachyura (zoeae)																											100%						-
Osteichthyes (larvae)																				100%													D
Ostracoda								100%																									
Paracalanus spp.																														100%			
Microsetella spp.																		100%															
Eurytemora spp.																					100%												
	Acart	Bisal Spp.	Cope, lane	Poddo (no	Oith NPloops NPlij	Calar Spp.	Pseulo (cl.	Andiapro,	Cash mus spp.	Temor Copoda (le	Bryon Spp. Proc/life	Polyle Pacina)	Ascillate (16)	Harriage (la	Centiloida Naej	Chill opages Chibert	Obell of the Spp.	Chadle (lange)	Cirripe Spp. Medusal	Chack dia lan	Pseulo Ognatha Nac)	Cnida Jocalanus	Decaporation (Jan. Spp.	Pritille Poda Police	Oikople objective of the objective of th	Monsi, Spp.	Decap	Ostell Oda brat	Ostral Chipura (2)	Paraciola Marvael Joedel	Micros danus Sp.	Eurytemo.	\$ 100.
															Pre	dicte	ed Val	ues															

Classification Report Matrix

m		ation Repoi Irning objed	
	precision	recall	f1-score
Acartia spp. (n=18062-train=200)	0.99	0.19	0.32
Bivalvia (larvae) (n=7955-train=200)	0.95	0.91	0.93
Copepoda (nauplii) (n=2753-train=200)	0.72	0.84	0.78
Podon/Pleopsis spp. (n=2715-train=200)	0.84	0.43	0.57
Oithona spp. (n=2572-train=200)	0.22	0.70	0.33
Calanoida (ci-ciii) (n=1348-train=200)	0.21	0.23	0.22
Pseudodiaptomus spp. (n=1059-train=200)	0.30	0.49	0.37
Hydrozoa (medusa) (n=671-train=200)	0.72	0.67	0.69
Gastropoda (larvae/Limacina) (n=629-train=200)	0.27	0.52	0.35
Temora spp. (n=308-train=200)	0.22	0.15	0.18
Bryozoa (larvae) (n=247-train=200)	0.14	0.53	0.23
Polychaeta (larvae) (n=237-train=200)	0.26	0.21	0.23
Ascidiacea (larvae) (n=194-train=200)	0.86	0.89	0.87
Harpacticoida- epibenthic (n=108-train=200)	0.03	0.48	0.06
Centropages spp. (n=44-train=200)	0.01	0.09	0.02
Echinodermata (larvae) (n=37-train=200)	0.02	0.32	0.04
Obelia spp. (medusa) (n=21-train=200)	0.03	0.19	0.05
Evadne spp. (n=16-train=200)	0.02	0.62	0.03
Cirripedia (larvae) (n=16-train=200)	0.01	0.25	0.02
Chaetognatha (n=13-train=89)	0.80	0.31	0.44
Pseudocalanus spp. (n=7-train=200)	0.01	0.14	0.01
Cnidaria (larvae) (n=7-train=25)	0.06	0.29	0.10
apoda-non brachyura (larvae) (n=4-train=200)	0.12	0.75	0.20
Fritillaria spp. (n=3-train=200)	0.02	1.00	0.04
Oikopleura spp. (n=2-train=200)	0.00	0.00	0.00
Monstrillidae (n=2-train=27)	0.05	0.50	0.09
Decapoda-brachyura (zoeae) (n=1-train=200)	0.03	1.00	0.06
Osteichthyes (larvae) (n=1-train=45)	0.00	0.00	0.00
Ostracoda (n=1-train=25)	0.00	0.00	0.00
Paracalanus spp. (n=1-train=200)	0.00	1.00	0.00
Microsetella spp. (n=1-train=4)	0.00	0.00	0.00
Eurytemora spp. (n=1-train=200)	0.00	0.00	0.00
macro avg	0.25	0.43	0.23
weighted avg	0.82	0.46	0.50
	precision	recall	f1-score

## Predictions of discarded taxa from training

**Predicted Taxa** 



Actual discarded Taxa

Relative Abundance of Top Taxonomic Instances per Sample

