Use of SCN features: No
Max learning objects: Maximum objects/class
Strategy N° 1

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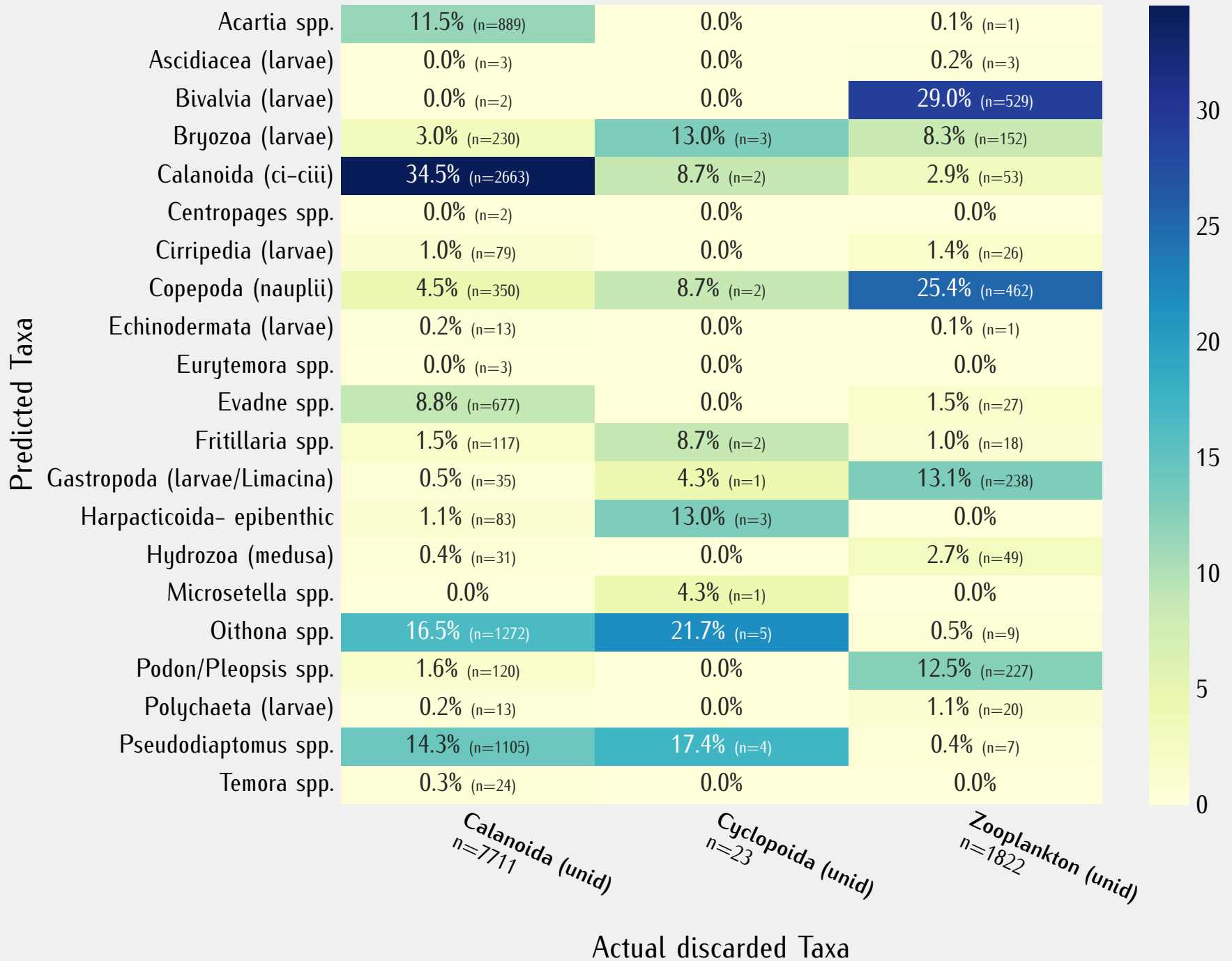## No Calanoida, Cyclopoida, Zooplankton classes in learning set

Confusion Matrix - In percent of Actual Value

Actual Values	Acartia spp.	Bivalvia (larvae)	Copepoda (nauplii)	Podon/Pleopsis spp.	Oithona spp.	Calanoida (ci-ciii)	Pseudodiaptomus spp.	Hydrozoa (medusa)	Gastropoda (larvae/Limacina)	Temora spp.	Bryozoa (larvae)	Polychaeta (larvae)	Ascidiacea (larvae)	Harpacticoida- epibenthic	Centropages spp.	Echinodermata (larvae)	Obelia spp. (medusa)	Evadne spp.	Cirripedia (larvae)	Chaetognatha	Pseudocalanus spp.	Cnidaria (larvae)	Decapoda-non brachyura (larvae)	Fritillaria spp.	Oikopleura spp.	Monstrillidae	Decapoda-brachyura (zoeae)	Osteichthyes (larvae)	Ostracoda	Paracalanus spp.	Microsetella spp.	Eurytemora spp.
Acartia spp.	75%		<1%	<1%	14%	4%	2%	<1%	<1%	<1%	<1%		<1%	<1%	<1%	<1%	<1%	3%	<1%					<1%	<1%				<1%			<1%
Bivalvia (larvae)	<1%	92%	1%	<1%	<1%	<1%	<1%	<1%	4%		<1%	<1%	<1%			<1%	<1%					<1%										
Copepoda (nauplii)		1%	94%	1%	<1%	<1%	<1%			<1%	<1%				<1%			<1%	<1%					<1%								
Podon/Pleopsis spp.	<1%	3%	13%	66%	<1%	<1%	<1%	2%	9%	<1%	3%	<1%		<1%			2%	1%				<1%			<1%				<1%			<1%
Oithona spp.	5%		<1%	<1%	80%	6%	4%			<1%		<1%	1%		<1%	1%	<1%			1%								<1%				
Calanoida (ci-ciii)	5%		4%	2%	15%	41%	13%	<1%	<1%	4%		2%		<1%			13%	1%			<1%											
Pseudodiaptomus spp.	11%		2%	<1%	16%	10%	55%		<1%	<1%	1%			<1%			4%	<1%														<1%
Hydrozoa (medusa)	4%	2%		5%	1%		<1%	72%	7%	<1%	1%			1%			5%	<1%						<1%								
Gastropoda (larvae/Limacina)	<1%	12%	8%	10%	<1%	<1%		1%	66%		<1%						<1%	<1%														
Temora spp.	23%		2%	<1%	5%	7%	16%		<1%	25%	2%		<1%	4%			13%	1%								<1%						<1%
Bryozoa (larvae)	<1%	<1%	23%	16%	<1%	<1%			9%		49%	<1%					<1%							<1%								
Polychaeta (larvae)	<1%		19%	5%	<1%	5%	3%		2%		1%	45%		<1%	<1%	11%	2%					<1%	2%			<1%	<1%					
Ascidiacea (larvae)	4%				3%		1%						91%									<1%			2%							
Harpacticoida- epibenthic	8%		5%		36%	14%	10%			2%	2%			16%			2%				<1%	5%										
Centropages spp.	70%				18%										11%																	
Echinodermata (larvae)	3%		11%	8%	3%	24%	3%									5%		30%	11%					3%								
Obelia spp. (medusa)	5%				14%			10%							5%		33%	33%														
Evadne spp.	6%							6%									81%	6%														
Cirripedia (larvae)			50%			6%			6%									38%														
Chaetognatha	15%									15%									15%				31%					23%				
Pseudocalanus spp.	86%													14%																		
Cnidaria (larvae)			29%			29%			14%								14%		14%													
Decapoda-non brachyura (larvae)																					75%			25%								
Fritillaria spp.																							100%									
Oikopleura spp.																							100%									
Monstrillidae	100%																															
Decapoda-brachyura (zoeae)																									100%							
Osteichthyes (larvae)																					100%											
Ostracoda									100%																							
Paracalanus spp.																														100%		
Microsetella spp.				100%																												
Eurytemora spp.	100%																															

Predicted Values

Classification Report Matrix
max available learning objects per class

	precision	recall	f1-score
Acartia spp. (n=18062-train=101461)	0.97	0.75	0.84
Bivalvia (larvae) (n=7955-train=3574)	0.97	0.92	0.95
Copepoda (nauplii) (n=2753-train=10297)	0.79	0.94	0.86
Podon/Pleopsis spp. (n=2715-train=3541)	0.87	0.66	0.75
Oithona spp. (n=2572-train=4428)	0.40	0.80	0.54
Calanoida (ci-ciii) (n=1348-train=1531)	0.32	0.41	0.36
Pseudodiaptomus spp. (n=1059-train=2113)	0.43	0.55	0.48
Hydrozoa (medusa) (n=671-train=3730)	0.78	0.72	0.75
Gastropoda (larvae/Limacina) (n=629-train=2871)	0.39	0.66	0.49
Temora spp. (n=308-train=2199)	0.52	0.25	0.33
Bryozoa (larvae) (n=247-train=973)	0.34	0.49	0.40
Polychaeta (larvae) (n=237-train=464)	0.80	0.45	0.57
Ascidiacea (larvae) (n=194-train=805)	0.97	0.91	0.94
Harpacticoida- epibenthic (n=108-train=372)	0.12	0.16	0.13
Centropages spp. (n=44-train=3461)	0.05	0.11	0.07
Echinodermata (larvae) (n=37-train=118)	0.13	0.05	0.08
Obelia spp. (medusa) (n=21-train=952)	0.39	0.33	0.36
Evadne spp. (n=16-train=7238)	0.01	0.81	0.03
Cirripedia (larvae) (n=16-train=716)	0.05	0.38	0.10
Chaetognatha (n=13-train=18)	1.00	0.15	0.27
Pseudocalanus spp. (n=7-train=228)	0.00	0.00	0.00
Cnidaria (larvae) (n=7-train=20)	1.00	0.14	0.25
Decapoda-non brachyura (larvae) (n=4-train=197)	0.25	0.75	0.38
Fritillaria spp. (n=3-train=2701)	0.02	1.00	0.05
Oikopleura spp. (n=2-train=37)	0.00	0.00	0.00
Monstrillidae (n=2-train=27)	0.00	0.00	0.00
Decapoda-brachyura (zoeae) (n=1-train=277)	0.14	1.00	0.25
Osteichthyes (larvae) (n=1-train=43)	0.00	0.00	0.00
Ostracoda (n=1-train=1)	0.00	0.00	0.00
Paracalanus spp. (n=1-train=82)	0.00	0.00	0.00
Microsetella spp. (n=1-train=4)	0.00	0.00	0.00
Eurytemora spp. (n=1-train=1730)	0.00	0.00	0.00
macro avg	0.37	0.42	0.32
weighted avg	0.85	0.76	0.79

Predictions of discarded taxa from training

Predicted Taxa	Calanoida (unid) n=7711	Cyclopoida (unid) n=23	Zooplankton (unid) n=1822
Acartia spp.	11.5% (n=889)	0.0%	0.1% (n=1)
Ascidiacea (larvae)	0.0% (n=3)	0.0%	0.2% (n=3)
Bivalvia (larvae)	0.0% (n=2)	0.0%	29.0% (n=529)
Bryozoa (larvae)	3.0% (n=230)	13.0% (n=3)	8.3% (n=152)
Calanoida (ci-ciii)	34.5% (n=2663)	8.7% (n=2)	2.9% (n=53)
Centropages spp.	0.0% (n=2)	0.0%	0.0%
Cirripedia (larvae)	1.0% (n=79)	0.0%	1.4% (n=26)
Copepoda (nauplii)	4.5% (n=350)	8.7% (n=2)	25.4% (n=462)
Echinodermata (larvae)	0.2% (n=13)	0.0%	0.1% (n=1)
Eurytemora spp.	0.0% (n=3)	0.0%	0.0%
Evadne spp.	8.8% (n=677)	0.0%	1.5% (n=27)
Fritillaria spp.	1.5% (n=117)	8.7% (n=2)	1.0% (n=18)
Gastropoda (larvae/Limacina)	0.5% (n=35)	4.3% (n=1)	13.1% (n=238)
Harpacticoida- epibenthic	1.1% (n=83)	13.0% (n=3)	0.0%
Hydrozoa (medusa)	0.4% (n=31)	0.0%	2.7% (n=49)
Microsetella spp.	0.0%	4.3% (n=1)	0.0%
Oithona spp.	16.5% (n=1272)	21.7% (n=5)	0.5% (n=9)
Podon/Pleopsis spp.	1.6% (n=120)	0.0%	12.5% (n=227)
Polychaeta (larvae)	0.2% (n=13)	0.0%	1.1% (n=20)
Pseudodiaptomus spp.	14.3% (n=1105)	17.4% (n=4)	0.4% (n=7)
Temora spp.	0.3% (n=24)	0.0%	0.0%

Actual discarded Taxa

Relative Abundance of Top Taxonomic Instances per Sample