Use of SCN features: No

Max learning objects: 200 objects/class Strategy N° 5

## NL 2020 Selected Samples prediction using all regions training set, Learning with all classes present in the selected samples, no extra training categories, No Anthoathecata, Calanoida, Copepoda, Zooplankton classes in learning set

Confusion Matrix - In percent of Actual Value

										Contu	Ston N	/latrix	- IN	percer	11 01 /	Actuat	Value								
Temora spp.	43%	6%	2%	19%	3%	<1%	18%	<1%	2%		<1%	<1%	2%				<1%	<1%	<1%	<1%	<1%	<1%	2%	<1%	
Acartia spp.	20%	33%	1%	16%	7%	<1%	14%		2%		<1%	<1%	3%	<1%				<1%		<1%	<1%	2%	<1%	<1%	
Evadne spp.	<1%	<1%	77%	<1%		7%	2%	<1%	1%		<1%	5%	2%				<1%	<15	б			<1%	2%	1%	
Pseudocalanus spp.	19%	11%	<1%	42%	8%	<1%	15%		<1%				2%	<1%		<1%	<1%			2%	<1%	<1%	<1%	<1%	
Centropages spp.	5%	2%		1%	86%								<1%						<1%	5%				<1%	
Podon/Pleopsis spp.	19%	<1%	7%	3%		<1%	11%					<1%	<1%				5%			9%	2%	9%	31%	<1%	<1%
Eurytemora spp.	3%	8%	2%	1%		<1%	71%		8%				2%										2%	1%	
Gastropoda (larvae/Limacina)			<1%			27%		44%		6%		10%											12%		
Oithona spp.		3%	1%				1%		87%		2%		3%					2%					1%		
Bivalvia (larvae)								10%		85%		5%													
Oikopleura spp.					1%						30%			1%	50%			6%		10%		1%			
Hydrozoa (medusa)			3%		2%							8%		2%			41%	2%		3%	2%	34%	5%		
Harpacticoida- epibenthic	2%	2%		24%	2%		22%						46%										2%		
Calanus spp.					4%									72%					4%	20%					
Chaetognatha				7%											93%										
Chiridius spp.				36%										36%						29%					
Aglantha spp. (medusa)														10%			80%					10%			
Fritillaria spp.		14%							14%		29%							29% 14%	j						
Echinodermata (larvae)						20%			40%									40%							
Metridia spp.				50%																50%					
apoda–non brachyura (larvae)														50%						50%					
Cnidaria (larvae)																				50%			50%		
Obelia spp. (medusa)																						100%			
Polychaeta (larvae)				100%																					
Amphipoda														100%											
Tomopteris spp.																						100%			
	Temora	Acartle Spp.	Spp.	PSellot.	Centro, academis St.	Podon Dodges Spp.	Euryte Pleopsis	Castro, Spp.	Oithorn Corne	Bivalle Spp. Pellinacino	Oikopi (larve)	Hydro, Spp.	Harpa (medus	Calanto Calcolda (Sp. 19)	Chaere ys Spp. Dibenthic	Chirida Chirida	Aglann, Spp.	Pritillaria Sp. (medusa)	Methodernote !	Decap	Cnidal Coda non by	Obelia (larvae)	Polych Sp. (med.	Amphilian de land	Tomoph oda
												Pı	redicte	d Valu	les										

n	Classification Report Matrix max 200 learning objects per class								
	precision	recall	f1-score						
<b>Temora spp.</b> (n=18103-train=200)	0.70	0.43	0.53						
Acartia spp. (n=13302-train=200)	0.74	0.33	0.46						
Evadne spp. (n=5228-train=200)	0.88	0.77	0.82						
Pseudocalanus spp. (n=3053-train=200)	0.19	0.42	0.26						
Centropages spp. (n=330-train=200)	0.14	0.86	0.24						
Podon/Pleopsis spp. (n=253-train=200)	0.00	0.00	0.00						
Eurytemora spp. (n=178-train=200)	0.02	0.71	0.04						
Gastropoda (larvae/Limacina) (n=112-train=200)	0.49	0.44	0.46						
Oithona spp. (n=98-train=200)	0.10	0.87	0.17						
Bivalvia (larvae) (n=92-train=200)	0.92	0.85	0.88						
Oikopleura spp. (n=70-train=200)	0.20	0.30	0.24						
Hydrozoa (medusa) (n=64-train=200)	0.02	0.08	0.03						
Harpacticoida- epibenthic (n=50-train=200)	0.02	0.46	0.04						
Calanus spp. (n=25-train=200)	0.49	0.72	0.58						
Chaetognatha (n=15-train=89)	0.29	0.93	0.44						
Chiridius spp. (n=14-train=1)	0.00	0.00	0.00						
Aglantha spp. (medusa) (n=10-train=22)	0.10	0.80	0.18						
Fritillaria spp. (n=7-train=200)	0.03	0.29	0.05						
Echinodermata (larvae) (n=5-train=200)	0.00	0.00	0.00						
Metridia spp. (n=2-train=16)	0.00	0.00	0.00						
ecapoda-non brachyura (larvae) (n=2-train=200)	0.01	0.50	0.02						
Cnidaria (larvae) (n=2-train=25)	0.00	0.00	0.00						
Obelia spp. (medusa) (n=1-train=200)	0.00	1.00	0.01						
Polychaeta (larvae) (n=1-train=200)	0.00	0.00	0.00						
<b>Amphipoda</b> (n=1-train=27)	0.00	0.00	0.00						
Tomopteris spp. (n=1-train=1)	0.00	0.00	0.00						
macro avg	0.21	0.41	0.21						
weighted avg	0.68	0.45	0.52						
	precision	recall	f1-score						

## Predictions of discarded taxa from training

	Acartia spp.	0.0%	0.0%	9.8% (n=447)	1.9% (n=21)	70	)
	Aglantha spp. (medusa)	50.0% (n=3)	0.0%	0.0%	0.4% (n=4)		
	Amphipoda	0.0%	0.0%	0.9% (n=40)	0.1% (n=1)		
	Bivalvia (larvae)	0.0%	0.0%	0.0%	2.0% (n=23)	60	)
	Calanus spp.	0.0%	0.0%	0.0% (n=1)	0.0%		
	Centropages spp.	0.0%	6.2% (n=2)	1. <b>7</b> % (n=77)	1.3% (n=15)		
	Cnidaria (larvae)	0.0%	0.0%	0.2% (n=8)	0.1% (n=1)	50	50
	Decapoda-non brachyura (larvae)	0.0%	0.0%	0.3% (n=15)	0.3% (n=3)		
Э	Echinodermata (larvae)	0.0%	0.0%	0.1% (n=4)	0.5% (n=6)		
Predicted Taxa	Eurytemora spp.	0.0%	18.8% (n=6)	24.0% (n=1097)	3.1% (n=35)	40	0
Pê	Evadne spp.	0.0%	0.0%	13.3% (n=605)	24.8% (n=279)		
icte	Fritillaria spp.	$16.7\% \ (n=1)$	0.0%	0.2% (n=9)	0.5% (n=6)		30
red	Gastropoda (larvae/Limacina)	0.0%	0.0%	0.2% (n=7)	7.9% (n=89)	30	
Д	Harpacticoida- epibenthic	0.0%	3.1% (n=1)	4.2% (n=191)	2.2% (n=25)	30	
	Hydrozoa (medusa)	0.0%	0.0%	0.3% (n=14)	11.1% (n=125)		
	Obelia spp. (medusa)	33.3% (n=2)	0.0%	2.1% (n=98)	1.9% (n=21)	20	20
	Oikopleura spp.	0.0%	0.0%	0.5% (n=25)	0.9% (n=10)	20	
	Oithona spp.	0.0%	0.0%	10.6% (n=484)	1.9% (n=21)		
	Podon/Pleopsis spp.	0.0%	0.0%	1.3% (n=60)	25.7% (n=289)	10	10
	Polychaeta (larvae)	0.0%	0.0%	6.1% (n=278)	11.0% (n=124)	10	
	Pseudocalanus spp.	0.0%	71.9% (n=23)	12.5% (n=571)	0.8% (n=9)		
	Temora spp.	0.0%	0.0%	<b>11.6%</b> (n=531)	1.4% (n=16)	0	
		Anthoatheo	Calanoida n≈32 Cata (medusa)		Zooplankto n≥1123 (unid)	n (unid)	

Actual discarded Taxa

Relative Abundance of Top Taxonomic Instances per Sample Val Pred 1.0 -



