

Use of SCN features: No
Max learning objects: 200 objects/class
Strategy N° 8

NL 2021 Selected Samples prediction using all regions training set,
Learning with selected samples classes with no low global training instances, with extra regional training categories,
No Calanoida (ci-vi), Cyclopoida, Zooplankton classes in learning set

Confusion Matrix – In percent of Actual Value

Classification Report Matrix
max 200 learning objects per class

Actual Values

Decapoda-non brachyura (larvae)	Acartia spp.	41%	<1%	4%	14%	1%			<1%	<1%	7%			2%			<1%	3%			<1%		9%	7%			<1%		<1%	4%	4%
	Evadne spp.		76%		<1%	<1%	1%	4%	<1%			<1%	2%	<1%	10%	<1%		1%		<1%		<1%					4%		<1%		<1%
	Temora spp.	10%	2%	31%	10%	3%	<1%	<1%	<1%		9%			1%				4%		<1%		9%	2%	<1%	1%		<1%	1%	16%		
	Pseudocalanus spp.	18%		6%	43%	<1%			<1%		9%			1%				4%		<1%	<1%	9%	<1%	1%				<1%	2%	2%	
	Oithona spp.	12%	1%	<1%		71%			<1%	1%	<1%	<1%		2%			<1%				3%	3%			<1%			<1%	3%		
	Bryozoa (larvae)		19%			<1%	50%	1%				1%		7%	10%		1%	2%		3%						4%	2%	<1%			
	Podon/Pleopsis spp.		8%	12%	<1%		2%	5%		<1%	1%		<1%	<1%	<1%			27%		17%		4%		8%	6%		4%			3%	
	Calanoida (ci-ciii)	9%	9%	2%	5%	5%	2%	5%	2%		3%			3%			<1%	24%		2%	<1%	2%	<1%	2%	6%					13%	
	Oikopleura spp.	<1%			<1%	2%				33%				<1%			8%		33%		<1%	<1%	2%	7%			4%	6%	<1%		
	Centropages spp.	6%		1%	2%						68%												12%	5%					6%		
	Echinodermata (larvae)	2%				20%		2%		8%		12%					42%			2%			2%	2%	2%	2%	2%	2%		4%	
	Gastropoda (larvae/Limacina)							6%					53%		13%	13%				15%											
	Harpacticoida- epibenthic	6%	2%	4%	6%	2%			2%					45%	2%							13%							9%	9%	
	Hydrozoa (medusa)		2%	2%		2%	2%					2%			21%		4%	2%			4%					6%			51%		
	Bivalvia (larvae)						7%						7%		7%	73%											7%				
	Fritillaria spp.	3%				9%					38%		3%					47%													
	Microcalanus spp.		6%		3%		3%		3%										58%		6%		13%								6%
	Chaetognatha										11%									86%		4%									
	Polychaeta (larvae)					5%		5%					10%	10%	5%			10%		20%			5%	5%	20%					5%	
	Calanus spp.																				86%		7%	7%							
Eurytemora spp.				40%							40%											10%	10%								
Tortanus spp.																							100%								
Decapoda-non brachyura (larvae)																				100%											

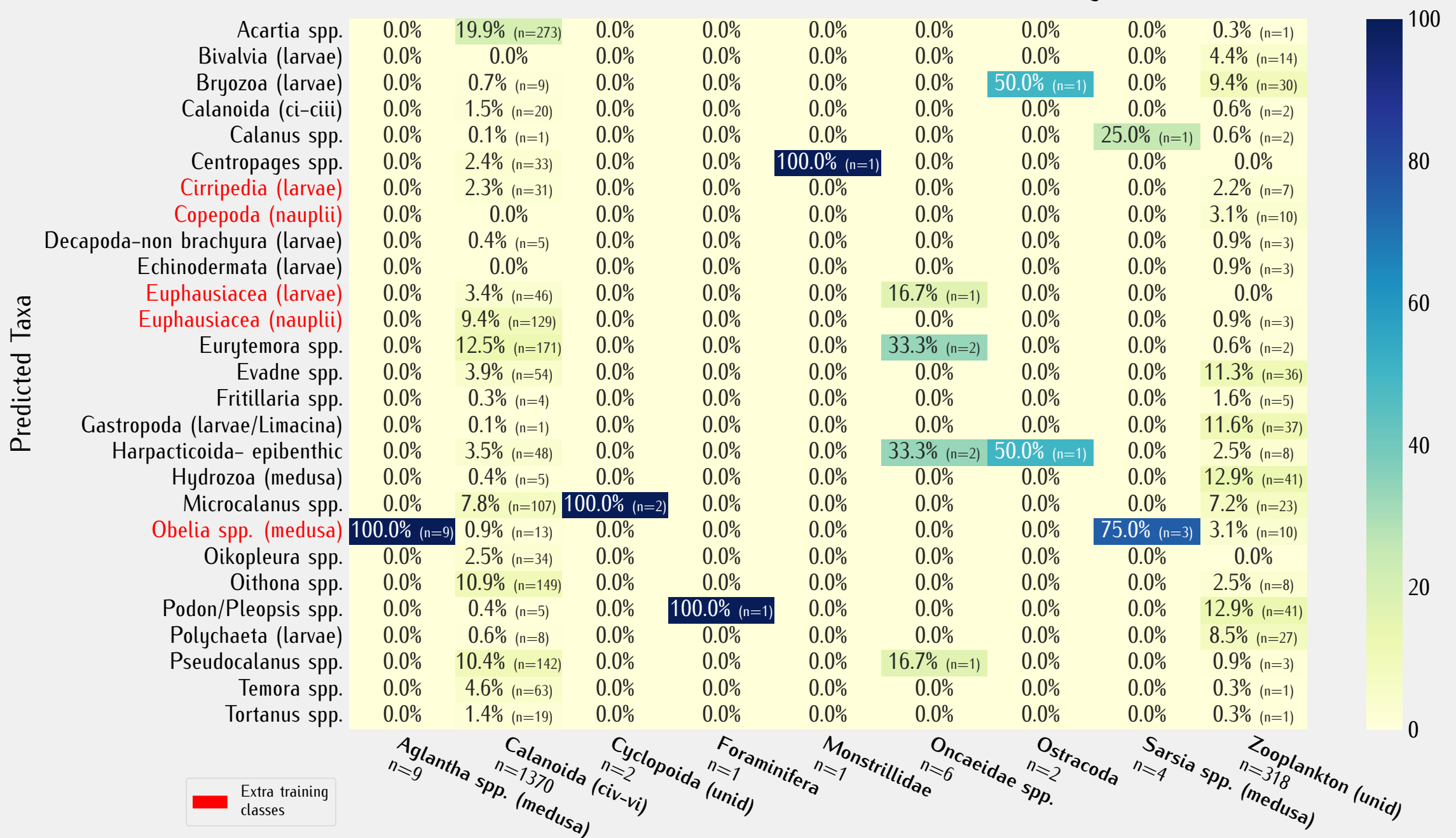
Acartia spp.
Evadne spp.
Temora spp.
Pseudocalanus spp.
Oithona spp.
Bryozoa (larvae)
Podon/Pleopsis spp.
Calanoida (ci-ciii)
Oikopleura spp.
Centropages spp.
Echinodermata (larvae)
Gastropoda (larvae/Limacina)
Harpacticoida- epibenthic
Hydrozoa (medusa)
Bivalvia (larvae)
Fritillaria spp.
Microcalanus spp.
Chaetognatha
Polychaeta (larvae)
Calanus spp.
Eurytemora spp.
Tortanus spp.
Decapoda-non brachyura (larvae)
Cirripedia (larvae)
Copepoda (nauplii)
Obelia spp. (medusa)
Euphausiacea (larvae)
Euphausiacea (nauplii)

Extra
training
classes

	precision	recall	f1-score
Acartia spp. (n=2490-train=200)	0.72	0.41	0.52
Evadne spp. (n=1931-train=200)	0.93	0.76	0.83
Temora spp. (n=1416-train=200)	0.68	0.31	0.42
Pseudocalanus spp. (n=1044-train=200)	0.46	0.43	0.44
Oithona spp. (n=345-train=200)	0.70	0.71	0.70
Bryozoa (larvae) (n=248-train=200)	0.76	0.50	0.60
Podon/Pleopsis spp. (n=230-train=200)	0.12	0.05	0.07
Calanoida (ci-ciii) (n=130-train=200)	0.12	0.02	0.04
Oikopleura spp. (n=115-train=200)	0.51	0.33	0.40
Centropages spp. (n=88-train=200)	0.13	0.68	0.21
Echinodermata (larvae) (n=50-train=200)	0.40	0.12	0.18
Gastropoda (larvae/Limacina) (n=47-train=200)	0.40	0.53	0.46
Harpacticoida- epibenthic (n=47-train=200)	0.14	0.45	0.22
Hydrozoa (medusa) (n=47-train=200)	0.04	0.21	0.07
Bivalvia (larvae) (n=44-train=200)	0.82	0.73	0.77
Fritillaria spp. (n=34-train=200)	0.24	0.47	0.32
Microcalanus spp. (n=31-train=80)	0.06	0.58	0.10
Chaetognatha (n=28-train=89)	0.39	0.86	0.53
Polychaeta (larvae) (n=20-train=200)	0.05	0.20	0.08
Calanus spp. (n=14-train=200)	0.52	0.86	0.65
Eurytemora spp. (n=10-train=200)	0.00	0.10	0.00
Tortanus spp. (n=2-train=200)	0.01	1.00	0.02
Decapoda-non brachyura (larvae) (n=1-train=200)	0.00	0.00	0.00
Cirripedia (larvae) (n=0-train=200)	-	-	-
Copepoda (nauplii) (n=0-train=200)	-	-	-
Obelia spp. (medusa) (n=0-train=200)	-	-	-
Euphausiacea (larvae) (n=0-train=87)	-	-	-
Euphausiacea (nauplii) (n=0-train=145)	-	-	-
macro avg (corr)	0.36	0.45	0.33
weighted avg	0.67	0.48	0.54
	precision	recall	f1-score



Predictions of discarded taxa from training



Actual discarded Taxa

Relative Abundance of Top Taxonomic Instances per Sample

