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

Use of SCN features: Yes
Max learning objects: Maximum objects/class
Strategy N° 7

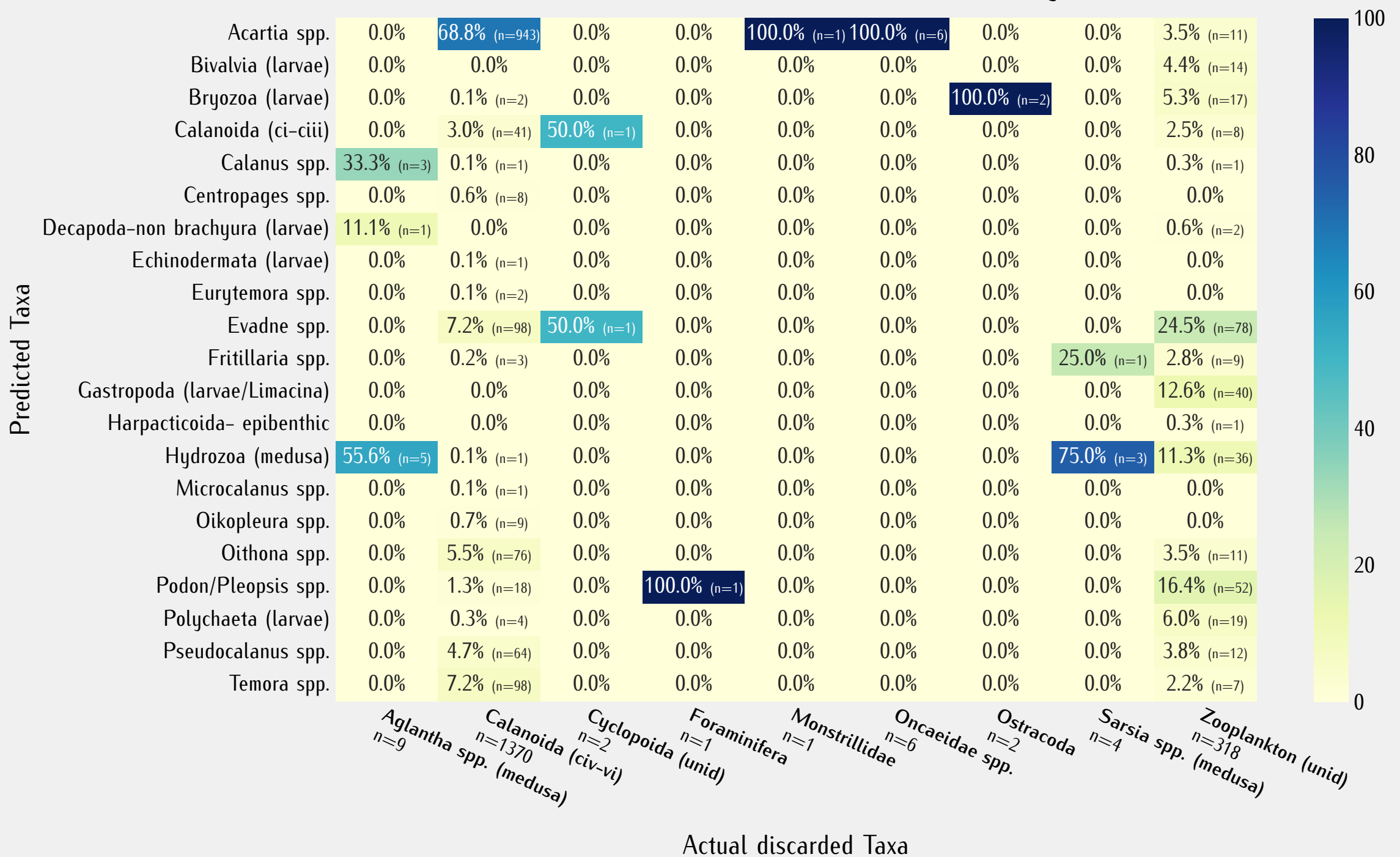### Confusion Matrix - In percent of Actual Value

Actual Values	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)
Acartia spp.	96%	<1%	2%	<1%	<1%			<1%	<1%	<1%						<1%	<1%						
Evadne spp.	<1%	89%	<1%	<1%	<1%	<1%	4%	<1%		<1%	1%	<1%	4%	<1%	<1%			<1%					
Temora spp.	40%	3%	47%	4%	<1%	<1%	<1%	3%		2%								<1%		<1%			
Pseudocalanus spp.	54%		8%	36%				<1%		1%								<1%	<1%				
Oithona spp.	30%	<1%	<1%		66%			<1%		<1%				1%									
Bryozoa (larvae)		35%	<1%		<1%	50%	2%	2%		1%		<1%	6%		<1%		1%						
Podon/Pleopsis spp.	13%	15%	22%	2%			30%	1%	<1%	<1%		2%				8%							7%
Calanoida (ci-ciii)	35%	16%	10%	5%	4%		12%	15%		<1%						<1%	<1%						<1%
Oikopleura spp.	2%		3%	<1%	2%				72%					14%		2%							4%
Centropages spp.	19%		3%	1%						70%												3%	2%
Echinodermata (larvae)	12%				10%		2%		2%		14%			2%		54%		2%					2%
Gastropoda (larvae/Limacina)						4%						70%		4%	15%			6%					
Harpacticoida- epibenthic	87%	2%	2%		4%								2%						2%				
Hydrozoa (medusa)	4%		2%			6%	6%			2%				51%		13%		2%	4%				9%
Bivalvia (larvae)						7%	7%				5%		7%	70%			5%						
Fritillaria spp.	6%				6%				26%						62%								
Microcalanus spp.	23%	16%	13%	6%			16%	19%									6%						
Chaetognatha									43%									50%	4%	4%			
Polychaeta (larvae)	5%	15%	5%	5%	5%		10%			10%								40%				5%	
Calanus spp.				7%						7%									79%			7%	
Eurytemora spp.	70%		10%	20%																			
Tortanus spp.	50%																				50%		
Decapoda-non brachyura (larvae)																				100%			

Actual Values

Predicted Values

Classification Report Matrix
max available learning objects per class

	precision	recall	f1-score
Acartia spp. (n=2490-train=111319)	0.63	0.96	0.76
Evadne spp. (n=1931-train=11064)	0.89	0.89	0.89
Temora spp. (n=1416-train=7347)	0.76	0.47	0.58
Pseudocalanus spp. (n=1044-train=4845)	0.83	0.36	0.50
Oithona spp. (n=345-train=5881)	0.84	0.66	0.74
Bryozoa (larvae) (n=248-train=1142)	0.90	0.50	0.64
Podon/Pleopsis spp. (n=230-train=7347)	0.36	0.30	0.33
Calanoida (ci-ciii) (n=130-train=5557)	0.21	0.15	0.17
Oikopleura spp. (n=115-train=5305)	0.78	0.72	0.75
Centropages spp. (n=88-train=3620)	0.54	0.70	0.61
Echinodermata (larvae) (n=50-train=3043)	0.41	0.14	0.21
Gastropoda (larvae/Limacina) (n=47-train=3272)	0.57	0.70	0.63
Harpacticoida- epibenthic (n=47-train=555)	0.33	0.02	0.04
Hydrozoa (medusa) (n=47-train=4052)	0.18	0.51	0.27
Bivalvia (larvae) (n=44-train=3764)	0.78	0.70	0.74
Fritillaria spp. (n=34-train=6992)	0.25	0.62	0.36
Microcalanus spp. (n=31-train=80)	0.67	0.06	0.12
Chaetognatha (n=28-train=89)	0.88	0.50	0.64
Polychaeta (larvae) (n=20-train=1577)	0.20	0.40	0.26
Calanus spp. (n=14-train=359)	0.61	0.79	0.69
Eurytemora spp. (n=10-train=1818)	0.00	0.00	0.00
Tortanus spp. (n=2-train=203)	0.25	0.50	0.33
Decapoda-non brachyura (larvae) (n=1-train=423)	0.00	0.00	0.00
macro avg	0.52	0.46	0.45
weighted avg	0.73	0.70	0.68
	precision	recall	f1-score

Predictions of discarded taxa from training

Predicted Taxa	Aglantha spp. (medusa) n=9	Calanoida (civ-vi) n=1370	Cyclopoida (unid) n=2	Foraminifera n=1	Monstrillidae n=1	Oncaeidae spp. n=6	Ostracoda n=2	Sarsia spp. (medusa) n=4	Zooplankton (unid) n=318
Acartia spp.	0.0%	68.8% (n=943)	0.0%	0.0%	100.0% (n=1)	100.0% (n=6)	0.0%	0.0%	3.5% (n=11)
Bivalvia (larvae)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.4% (n=14)
Bryozoa (larvae)	0.0%	0.1% (n=2)	0.0%	0.0%	0.0%	0.0%	100.0% (n=2)	0.0%	5.3% (n=17)
Calanoida (ci-ciii)	0.0%	3.0% (n=41)	50.0% (n=1)	0.0%	0.0%	0.0%	0.0%	0.0%	2.5% (n=8)
Calanus spp.	33.3% (n=3)	0.1% (n=1)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3% (n=1)
Centropages spp.	0.0%	0.6% (n=8)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Decapoda-non brachyura (larvae)	11.1% (n=1)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.6% (n=2)
Echinodermata (larvae)	0.0%	0.1% (n=1)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Eurytemora spp.	0.0%	0.1% (n=2)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Evadne spp.	0.0%	7.2% (n=98)	50.0% (n=1)	0.0%	0.0%	0.0%	0.0%	0.0%	24.5% (n=78)
Fritillaria spp.	0.0%	0.2% (n=3)	0.0%	0.0%	0.0%	0.0%	0.0%	25.0% (n=1)	2.8% (n=9)
Gastropoda (larvae/Limacina)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	12.6% (n=40)
Harpacticoida- epibenthic	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3% (n=1)
Hydrozoa (medusa)	55.6% (n=5)	0.1% (n=1)	0.0%	0.0%	0.0%	0.0%	0.0%	75.0% (n=3)	11.3% (n=36)
Microcalanus spp.	0.0%	0.1% (n=1)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Oikopleura spp.	0.0%	0.7% (n=9)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Oithona spp.	0.0%	5.5% (n=76)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.5% (n=11)
Podon/Pleopsis spp.	0.0%	1.3% (n=18)	0.0%	100.0% (n=1)	0.0%	0.0%	0.0%	0.0%	16.4% (n=52)
Polychaeta (larvae)	0.0%	0.3% (n=4)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	6.0% (n=19)
Pseudocalanus spp.	0.0%	4.7% (n=64)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.8% (n=12)
Temora spp.	0.0%	7.2% (n=98)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.2% (n=7)

Actual discarded Taxa

Relative Abundance of Top Taxonomic Instances per Sample