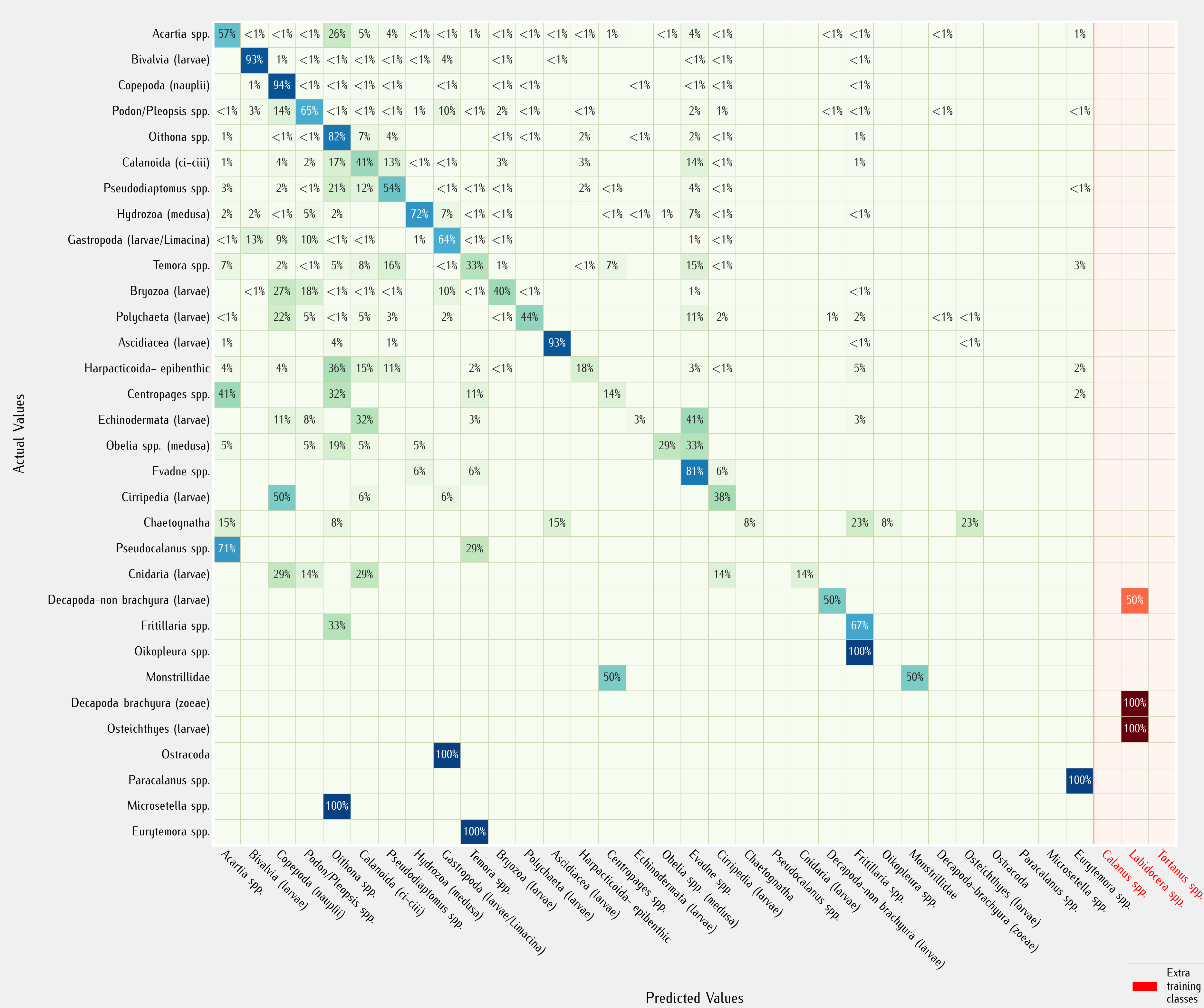


Use of SCN features: Yes
Max learning objects: 20000 objects/class
Strategy N° 2

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

Confusion Matrix – In percent of Actual Value



Classification Report Matrix
max 20000 learning objects per class

	precision	recall	f1-score
Acartia spp. (n=18062-train=20000)	0.99	0.57	0.72
Bivalvia (larvae) (n=7955-train=3574)	0.97	0.93	0.95
Copepoda (nauplii) (n=2753-train=10297)	0.77	0.94	0.85
Podon/Pleopsis spp. (n=2715-train=3541)	0.87	0.65	0.74
Oithona spp. (n=2572-train=4428)	0.29	0.82	0.43
Calanoida (ci-ciii) (n=1348-train=1531)	0.30	0.41	0.35
Pseudodiaptomus spp. (n=1059-train=2113)	0.35	0.54	0.42
Hydrozoa (medusa) (n=671-train=3730)	0.84	0.72	0.77
Gastropoda (larvae/Limacina) (n=629-train=2871)	0.38	0.64	0.47
Temora spp. (n=308-train=2199)	0.30	0.33	0.32
Bryozoa (larvae) (n=247-train=973)	0.37	0.40	0.39
Polychaeta (larvae) (n=237-train=464)	0.86	0.44	0.58
Ascidacea (larvae) (n=194-train=805)	0.96	0.93	0.95
Harpacticoida- epibenthic (n=108-train=372)	0.10	0.18	0.13
Centropages spp. (n=44-train=3461)	0.02	0.14	0.03
Echinodermata (larvae) (n=37-train=118)	0.11	0.03	0.04
Obelia spp. (medusa) (n=21-train=952)	0.27	0.29	0.28
Evadne spp. (n=16-train=7238)	0.01	0.81	0.02
Cirripedia (larvae) (n=16-train=716)	0.06	0.38	0.10
Chaetognatha (n=13-train=18)	1.00	0.08	0.14
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)	0.18	0.50	0.27
Fritillaria spp. (n=3-train=2701)	0.01	0.67	0.02
Oikopleura spp. (n=2-train=37)	0.00	0.00	0.00
Monstrillidae (n=2-train=27)	1.00	0.50	0.67
Decapoda-brachyura (zoeae) (n=1-train=277)	0.00	0.00	0.00
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
Calanus spp. (n=0-train=109)	-	-	-
Labidocera spp. (n=0-train=493)	-	-	-
Tortanus spp. (n=0-train=111)	-	-	-
macro avg (corr)	0.38	0.38	0.31
weighted avg	0.84	0.68	0.72

Predictions of discarded taxa from training

Predicted Taxa

Acartia spp.	4.6% (n=356)	0.0%	0.0%
Ascidacea (larvae)	0.0%	0.0%	0.1% (n=2)
Bivalvia (larvae)	0.0% (n=2)	0.0%	30.8% (n=562)
Bryozoa (larvae)	2.5% (n=196)	8.7% (n=2)	6.9% (n=126)
Calanoida (ci-ciii)	35.3% (n=2725)	8.7% (n=2)	2.7% (n=50)
Centropages spp.	0.0% (n=2)	0.0%	0.0%
Cirripedia (larvae)	0.9% (n=66)	0.0%	1.1% (n=20)
Copepoda (nauplii)	5.0% (n=384)	13.0% (n=3)	26.5% (n=482)
Echinodermata (larvae)	0.1% (n=7)	0.0%	0.1% (n=2)
Eurytemora spp.	0.2% (n=13)	0.0%	0.0%
Evadne spp.	10.2% (n=783)	0.0%	1.8% (n=32)
Fritillaria spp.	1.8% (n=142)	8.7% (n=2)	0.9% (n=17)
Gastropoda (larvae/Limacina)	0.6% (n=45)	4.3% (n=1)	13.6% (n=248)
Harpacticoida- epibenthic	1.1% (n=87)	26.1% (n=6)	0.0%
Hydrozoa (medusa)	0.2% (n=15)	0.0%	1.7% (n=31)
Obelia spp. (medusa)	0.0% (n=2)	0.0%	0.0%
Oithona spp.	20.3% (n=1567)	17.4% (n=4)	0.7% (n=12)
Podon/Pleopsis spp.	1.6% (n=124)	0.0%	12.2% (n=222)
Polychaeta (larvae)	0.1% (n=4)	0.0%	0.4% (n=8)
Pseudodiaptomus spp.	15.2% (n=1170)	13.0% (n=3)	0.4% (n=7)
Temora spp.	0.3% (n=21)	0.0%	0.1% (n=1)

Calanoida (unid)
n=7711

Cyclopoida (unid)
n=23

Zooplankton (unid)
n=1822

Actual discarded Taxa

35
30
25
20
15
10
5
0

Relative Abundance of Top Taxonomic Instances per Sample

