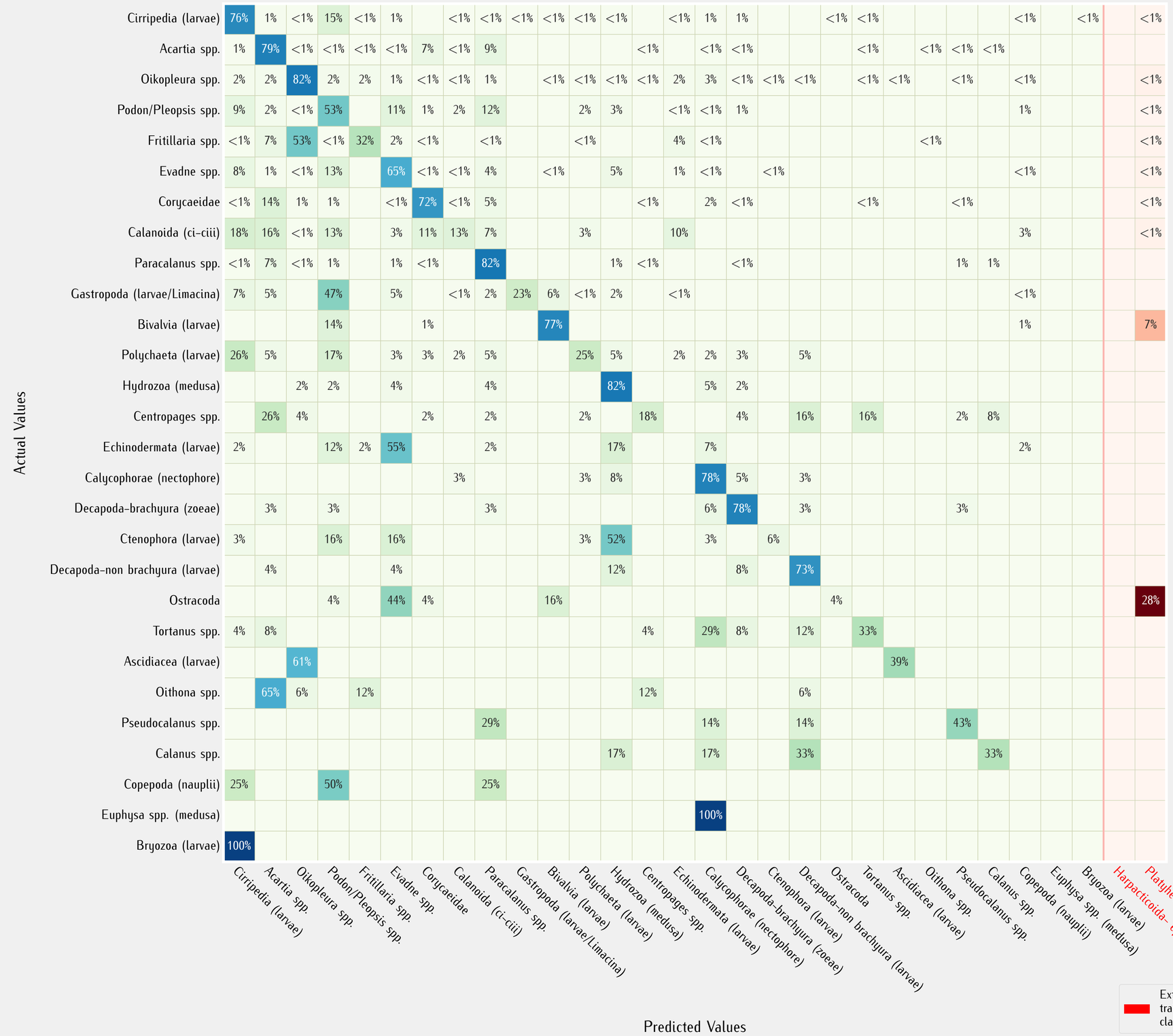
Use of SCN features: Yes
Max learning objects: Maximum objects/class
Strategy N° 2

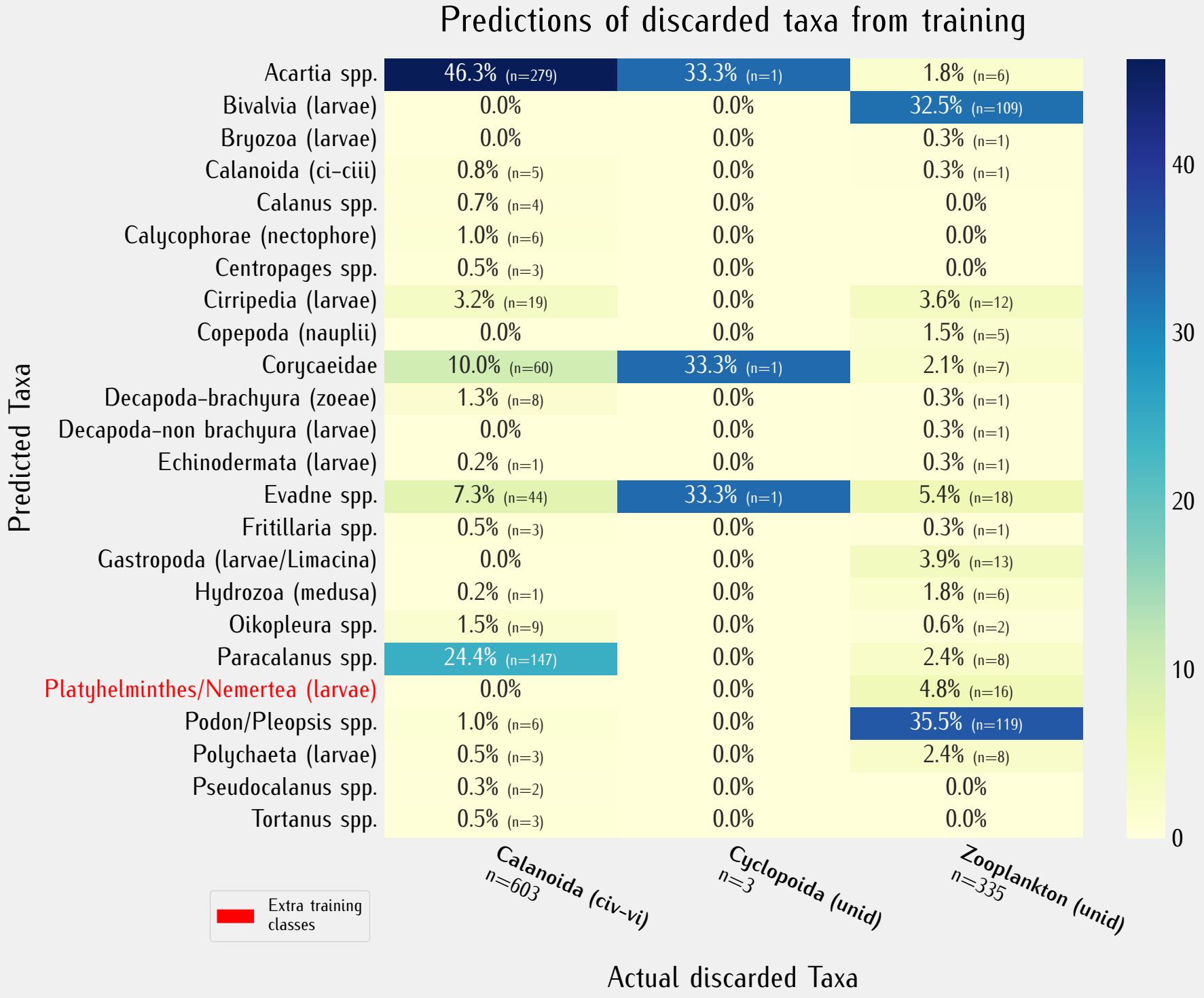
PA Selected Samples prediction using PA training set, Learning with all classes present in the selected samples, with extra training categories, No Calanoida (civ-vi), Cyclopoida, Zooplankton classes in learning set

Confusion Matrix - In percent of Actual Value



Classification Report Matrix
max available learning objects per class

	precision	recall	f1-score
Cirripedia (larvae) (n=3231-train=6358)	0.92	0.76	0.83
Acartia spp. (n=2290-train=4410)	0.88	0.79	0.83
Oikopleura spp. (n=1773-train=4507)	0.82	0.82	0.82
Podon/Pleopsis spp. (n=607-train=3605)	0.32	0.53	0.40
Fritillaria spp. (n=475-train=844)	0.78	0.32	0.46
Evadne spp. (n=358-train=981)	0.52	0.65	0.58
Corycaeidae (n=335-train=1760)	0.56	0.72	0.63
Calanoida (ci-ciii) (n=150-train=313)	0.35	0.13	0.19
Paracalanus spp. (n=141-train=1525)	0.23	0.82	0.36
Gastropoda (larvae/Limacina) (n=126-train=291)	0.83	0.23	0.36
Bivalvia (larvae) (n=96-train=119)	0.79	0.77	0.78
Polychaeta (larvae) (n=65-train=661)	0.30	0.25	0.27
Hydrozoa (medusa) (n=55-train=301)	0.32	0.82	0.46
Centropages spp. (n=50-train=119)	0.25	0.18	0.21
Echinodermata (larvae) (n=42-train=2649)	0.00	0.00	0.00
Calycophorae (nectophore) (n=37-train=966)	0.18	0.78	0.30
Decapoda-brachyura (zoeae) (n=32-train=343)	0.26	0.78	0.39
Ctenophora (larvae) (n=31-train=29)	0.50	0.06	0.11
Decapoda-non brachyura (larvae) (n=26-train=219)	0.47	0.73	0.58
Ostracoda (n=25-train=18)	0.09	0.04	0.06
Tortanus spp. (n=24-train=88)	0.26	0.33	0.29
Ascidiacea (larvae) (n=23-train=54)	0.90	0.39	0.55
Oithona spp. (n=17-train=44)	0.00	0.00	0.00
Pseudocalanus spp. (n=7-train=65)	0.23	0.43	0.30
Calanus spp. (n=6-train=37)	0.20	0.33	0.25
Copepoda (nauplii) (n=4-train=233)	0.00	0.00	0.00
Euphysa spp. (medusa) (n=3-train=3)	0.00	0.00	0.00
Bryozoa (larvae) (n=1-train=50)	0.00	0.00	0.00
Harpacticoida- epibenthic (n=0-train=47)	-	-	-
Platyhelminthes/Nemertea (larvae) (n=0-train=145)	-	-	-
macro avg (corr)	0.39	0.42	0.36
weighted avg	0.78	0.70	0.72
	precision	recall	f1-score


Predictions of discarded taxa from training
Predicted Taxa
Acartia spp.
Bivalvia (larvae)
Bryozoa (larvae)
Calanoida (ci-ciii)
Calanus spp.
Calycophorae (nectophore)
Centropages spp.
Cirripedia (larvae)
Copepoda (nauplii)
Corycaeidae
Decapoda-brachyura (zoeae)
Decapoda-non brachyura (larvae)
Echinodermata (larvae)
Evadne spp.
Fritillaria spp.
Gastropoda (larvae/Limacina)
Hydrozoa (medusa)
Oikopleura spp.
Paracalanus spp.
Platyhelminthes/Nemertea (larvae)
Podon/Pleopsis spp.
Polychaeta (larvae)
Pseudocalanus spp.
Tortanus spp.
46.3% (n=279)
33.3% (n=1)
1.8% (n=6)
0.0%
0.0%
32.5% (n=109)
0.0%
0.0%
0.3% (n=1)
0.8% (n=5)
0.0%
0.3% (n=1)
0.7% (n=4)
0.0%
0.0%
1.0% (n=6)
0.0%
0.0%
0.5% (n=3)
0.0%
0.0%
3.2% (n=19)
0.0%
3.6% (n=12)
0.0%
0.0%
1.5% (n=5)
10.0% (n=60)
33.3% (n=1)
2.1% (n=7)
1.3% (n=8)
0.0%
0.3% (n=1)
0.0%
0.0%
0.3% (n=1)
0.2% (n=1)
0.0%
0.3% (n=1)
7.3% (n=44)
33.3% (n=1)
5.4% (n=18)
0.5% (n=3)
0.0%
0.3% (n=1)
0.0%
0.0%
3.9% (n=13)
0.2% (n=1)
0.0%
1.8% (n=6)
1.5% (n=9)
0.0%
0.6% (n=2)
24.4% (n=147)
0.0%
2.4% (n=8)
0.0%
0.0%
4.8% (n=16)
1.0% (n=6)
0.0%
35.5% (n=119)
0.5% (n=3)
0.0%
2.4% (n=8)
0.3% (n=2)
0.0%
0.0%
0.5% (n=3)
0.0%
0.0%
40
30
20
10
0
Calanoida (civ-vi)
n=603
Cyclopoida (unid)
n=3
Zooplankton (unid)
n=335
Extra training classes
Actual discarded Taxa

Relative Abundance of Top Taxonomic Instances per Sample

Val Pred Val Pred Val Pred Val Pred Val Pred Val Pred Val Pred Val Pred Val Pred Val Pred

1.0
0.8
0.6
0.4
0.2
0.0

Relative Abundance

S11 S12 S13 S14 S15 S16 S17 S18 S19 S20

Sample Short ID

Most abundant classes (In Val or Pred)

- Acartia spp.
- Calanoida (ci–ciii)
- Calanoida (civ–vi)
- Cirripedia (larvae)
- Corycaeidae
- Evadne spp.
- Fritillaria spp.
- Oikopleura spp.
- Paracalanus spp.
- Podon/Pleopsis spp.
- Zooplankton (unid)
- Others