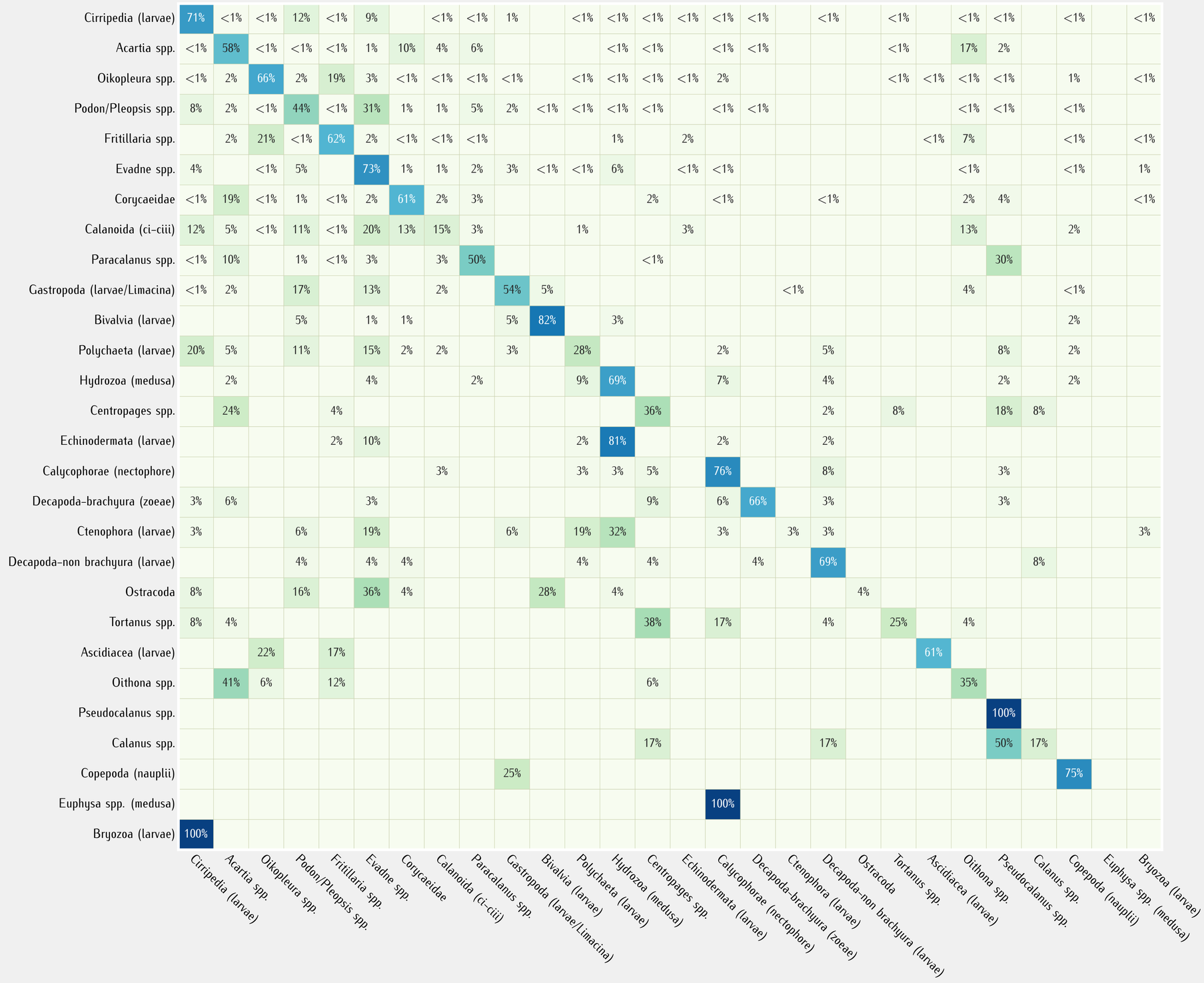
Use of SCN features: Yes
Max learning objects: 20000 objects/class
Strategy N° 5

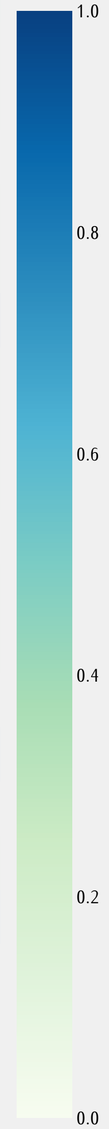
PA Selected Samples prediction using all regions training set, Learning with all classes present in the selected samples, no extra training categories, No Calanoida (civ-vi), Cyclopoida, Zooplankton classes in learning set

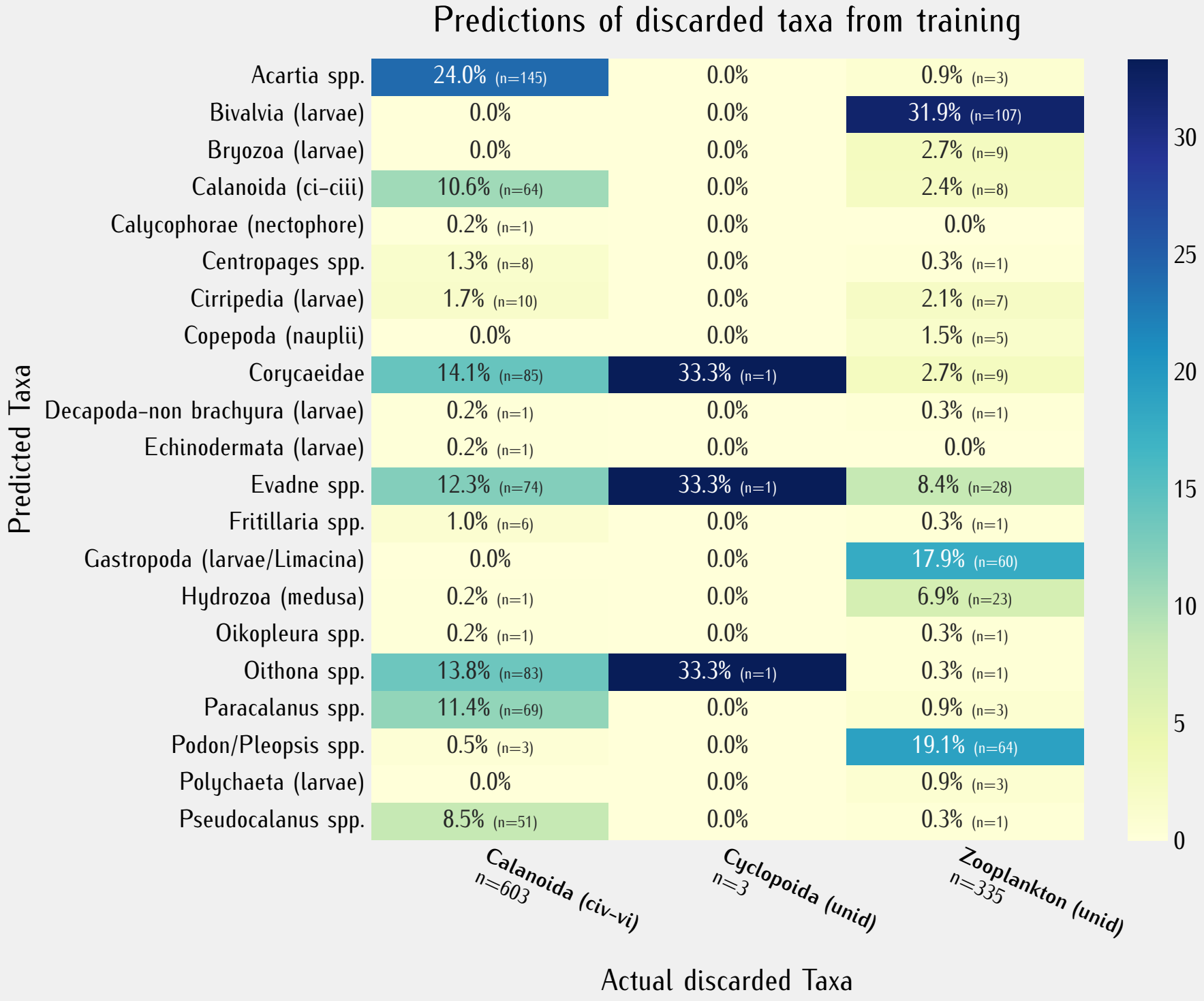
Confusion Matrix - In percent of Actual Value



Classification Report Matrix
max 20000 learning objects per class

	precision	recall	f1-score
Cirripedia (larvae) (n=3231-train=7685)	0.94	0.71	0.81
Acartia spp. (n=2290-train=20000)	0.87	0.58	0.69
Oikopleura spp. (n=1773-train=5305)	0.91	0.66	0.76
Podon/Pleopsis spp. (n=607-train=7347)	0.35	0.44	0.39
Fritillaria spp. (n=475-train=6992)	0.44	0.62	0.51
Evadne spp. (n=358-train=11064)	0.28	0.73	0.41
Corycaeidae (n=335-train=1760)	0.42	0.61	0.50
Calanoida (ci-ciii) (n=150-train=5557)	0.14	0.15	0.14
Paracalanus spp. (n=141-train=1619)	0.27	0.50	0.35
Gastropoda (larvae/Limacina) (n=126-train=3272)	0.46	0.54	0.50
Bivalvia (larvae) (n=96-train=3764)	0.84	0.82	0.83
Polychaeta (larvae) (n=65-train=1577)	0.33	0.28	0.30
Hydrozoa (medusa) (n=55-train=4052)	0.25	0.69	0.36
Centropages spp. (n=50-train=3620)	0.27	0.36	0.31
Echinodermata (larvae) (n=42-train=3043)	0.00	0.00	0.00
Calycophorae (nectophore) (n=37-train=966)	0.26	0.76	0.39
Decapoda-brachyura (zoeae) (n=32-train=628)	0.40	0.66	0.49
Ctenophora (larvae) (n=31-train=42)	0.50	0.03	0.06
Decapoda-non brachyura (larvae) (n=26-train=423)	0.53	0.69	0.60
Ostracoda (n=25-train=25)	1.00	0.04	0.08
Tortanus spp. (n=24-train=203)	0.46	0.25	0.32
Ascidiacea (larvae) (n=23-train=861)	0.78	0.61	0.68
Oithona spp. (n=17-train=5881)	0.01	0.35	0.02
Pseudocalanus spp. (n=7-train=4845)	0.05	1.00	0.10
Calanus spp. (n=6-train=359)	0.14	0.17	0.15
Copepoda (nauplii) (n=4-train=11555)	0.06	0.75	0.11
Euphysa spp. (medusa) (n=3-train=3)	0.00	0.00	0.00
Bryozoa (larvae) (n=1-train=1142)	0.00	0.00	0.00
macro avg	0.39	0.46	0.35
weighted avg	0.76	0.62	0.67
	precision	recall	f1-score




Predictions of discarded taxa from training
Predicted Taxa
Acartia spp.
Bivalvia (larvae)
Bryozoa (larvae)
Calanoida (ci-ciii)
Calycophorae (nectophore)
Centropages spp.
Cirripedia (larvae)
Copepoda (nauplii)
Corycaeidae
Decapoda-non brachyura (larvae)
Echinodermata (larvae)
Evadne spp.
Fritillaria spp.
Gastropoda (larvae/Limacina)
Hydrozoa (medusa)
Oikopleura spp.
Oithona spp.
Paracalanus spp.
Podon/Pleopsis spp.
Polychaeta (larvae)
Pseudocalanus spp.
24.0% (n=145)
0.0%
0.9% (n=3)
0.0%
0.0%
31.9% (n=107)
0.0%
0.0%
2.7% (n=9)
10.6% (n=64)
0.0%
2.4% (n=8)
0.2% (n=1)
0.0%
0.0%
1.3% (n=8)
0.0%
0.3% (n=1)
1.7% (n=10)
0.0%
2.1% (n=7)
0.0%
0.0%
1.5% (n=5)
14.1% (n=85)
33.3% (n=1)
2.7% (n=9)
0.2% (n=1)
0.0%
0.3% (n=1)
0.2% (n=1)
0.0%
0.0%
12.3% (n=74)
33.3% (n=1)
8.4% (n=28)
1.0% (n=6)
0.0%
0.3% (n=1)
0.0%
0.0%
17.9% (n=60)
0.2% (n=1)
0.0%
6.9% (n=23)
0.2% (n=1)
0.0%
0.3% (n=1)
13.8% (n=83)
33.3% (n=1)
0.3% (n=1)
11.4% (n=69)
0.0%
0.9% (n=3)
0.5% (n=3)
0.0%
19.1% (n=64)
0.0%
0.0%
0.9% (n=3)
8.5% (n=51)
0.0%
0.3% (n=1)
Calanoida (civ-vi)
n=603
Cyclopoida (unid)
n=3
Zooplankton (unid)
n=335
Actual discarded Taxa
30
25
20
15
10
5
0

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