

Assessment of microalgae species, biomass and distribution from spectral images using a convolution neural network

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Online Resource 5. Classification metrics for monoalgae cultures (A) and mixtures (B) using model 4. Values are means and standard deviations (SD) of three replicate trainings of the model topology 4.

A

	Precision	Sensitivity	Specificity	F1-score	Support
<i>Synechococcus</i>	0.90 (0.08)	0.90 (0.08)	0.96 (0.03)	0.90 (0.08)	7
<i>Microcystis</i>	0.92 (0.07)	0.92 (0.07)	0.96 (0.03)	0.92 (0.07)	8
<i>Cryptomonas</i>	1.00 (0.00)	1.00 (0.00)	1.00 (0.00)	1.00 (0.00)	4
<i>Peridinium</i>	1.00 (0.00)	1.00 (0.00)	1.00 (0.00)	1.00 (0.00)	4
<i>Desmodesmus</i>	1.00 (0.00)	1.00 (0.00)	1.00 (0.00)	1.00 (0.00)	3
Weighted average	0.95 (0.04)	0.95 (0.04)	0.98 (0.02)	0.95 (0.04)	26
Accuracy				0.95 (0.04)	26

B

	Precision	Sensitivity	Specificity	F1-score	Support
<i>Syn+Mic</i>	1.00 (0)	1.00 (0)	1.00 (0)	1.00 (0)	3
<i>Syn+Per</i>	1.00 (0)	1.00 (0)	1.00 (0)	1.00 (0)	1
<i>Syn+Des</i>	1.00 (0)	1.00 (0)	1.00 (0)	1.00 (0)	1
<i>Mic+Cryp</i>	1.00 (0)	1.00 (0)	1.00 (0)	1.00 (0)	1
<i>Mic+Per</i>	1.00 (0)	1.00 (0)	1.00 (0)	1.00 (0)	1
<i>Cryp+Per</i>	1.00 (0)	1.00 (0)	1.00 (0)	1.00 (0)	3
<i>Cryp+Des</i>	1.00 (0)	1.00 (0)	1.00 (0)	1.00 (0)	2
<i>Per+Des</i>	1.00 (0)	1.00 (0)	1.00 (0)	1.00 (0)	1
Weighted average	1.00 (0)	1.00 (0)	1.00 (0)	1.00 (0)	13
Accuracy				1.00 (0)	13