

Supplementary Table S2. Inclusion/exclusion criteria applied to select publications on the methods used to collect and assess biodiversity of floating *Sargassum* from database search for the review process.

| Inclusion criteria | Exclusion criteria |
|---|---|
| English language | Non-English language |
| Holopelagic <i>Sargassum</i> | Attached benthic <i>Sargassum</i> species, floating <i>Sargassum</i> from detached benthic species, floating kelp and non- <i>Sargassum</i> species |
| Study focused on the biodiversity of organisms associated with pelagic <i>Sargassum</i> | Study focused solely on the genetic diversity of <i>Sargassum</i> species (i.e., <i>S. natans</i> or <i>S. fluitans</i>) |
| Study focused on the biodiversity within, below or attached to pelagic <i>Sargassum</i> | Study focused solely on the biodiversity of open waters |
| Journal articles, theses | Reports, other documents |
| | Articles which looked solely at the microbiome community of <i>Sargassum</i> |