

## Metadata of the database

The consolidated dataset consists of 118661 entries (i.e. rows of the database), standing for one or multiple individuals (i.e. eggs, larvae, settlers or juveniles), each of them being characterized by 31 variables (i.e. columns of the database); their naming convention and meaning are described here.

- Project: Project's name or data source.
- DOI: DOI of the article when available.
- Ecoregion: Name of the ecoregion, following Spalding et al., 2007, in which sampling took place (Adriatic Sea, Alboran Sea, Ionian Sea, Western Mediterranean).
- Site: Name of the sampling site used by the data providers (all special characters have been removed).
- Latitude: Latitude of the site (decimal degrees - °).
- Longitude: Longitude of the site (decimal degrees - °).
- CoordinatesType: specify the event, e.g. spawning or settlement, to which geographical coordinates are associated (spawning coordinates, settlement coordinates).
- GeneralSamplingTechnique: General category of tool or method used to sample (Beam trawl, Bongo net, Epibenthic trawl, Fixed plankton net, Hand net, Light trap, Multiple opening / closing plankton net, Neuston 3 nets, Ring net, Shore seine, Underwater visual census).
- SpecificSamplingTechnique: Specific characteristic of the sampling tool or method used to sample (examples: CARE light-traps, 40 cm diameter Bongo net).
- SamplingDepth: Depth at which the sampling was performed (meters - m), that is NOT the total depth of the site.
- SiteMeasureValue: Value measuring the sampling effort (per unit of area or of volume or of time or a number of gears deployed).
- SiteMeasureUnit: Unit evaluating the sampling effort, depending on the method used (square meters - m<sup>2</sup>, cubic meters - m<sup>3</sup>, hours - h, number of traps – trap, number of trap per night - trap.night-1).
- SamplingDate: Date of sampling (ISO 8601 format - yyyy-mm-dd).
- Replicate: Number of replicates for a site (1 indicates no replicate).
- Family: Taxonomic name of the family.
- Genus: Taxonomic name of the genus.
- Species: Taxonomic name of the species.
- NumberOfIndividual: Number of individuals sampled for one entry (N).
- DensityValue: Value measuring the density of individuals per unit of area, volume, time or gear.
- DensityUnit: Unit evaluating the density of individuals (number of individuals per square meters - N.m<sup>-2</sup>, number of individuals per cubic meters - N.m<sup>-3</sup>, number of individuals per hour - N.h<sup>-1</sup>, number of individuals per trap - N.trap<sup>-1</sup>, number of individuals per trap per night - N.night.trap<sup>-1</sup>).
- Comments: Various comments on the observation.
- SamplingLength: Total length of the individuals at sampling (millimeters - mm).
- Stage: Stage of the individuals at sampling following Catalan et al., 2014 categorisation (Egg - Small larva [< 3 mm], Larva [3 - 6 mm], Settler [6 - 12 mm], Juvenile [> 12 mm]).
- SpawningDate\_mean: Mean spawning date (ISO 8601 format - yyyy-mm-dd).
- SpawningDate\_std: Standard deviation of the spawning date (days – d).

- SpawningDetermination: Methodology used to determine the spawning date (otolithometry, sampling date, back-calculation species-based, back-calculation genus-based).
- PLD\_mean: Mean Pelagic Larval Duration, which is computed as the time difference between spawning and settlement dates (days – d).
- PLD\_std: Standard deviation of the Pelagic Larval Duration (days – d).
- SettlementDate\_mean: Mean settlement date (ISO 8601 format - yyyy-mm-dd).
- SettlementDate\_std: Standard deviation of the settlement date (days – d).
- SettlementDetermination: Methodology used to determine the settlement date (otolithometry, sampling date, back-calculation species-based, back-calculation genus-based).

NA stands for “Not Available” and represents missing data.

All data follow the quality code 1 of SeaDataNet Thesaurus L20 (SeaDataNet measurand qualifier flags), except missing data NA associated to code 9 (<https://www.seadatanet.org/>).

#### References:

Catalan, I. A., Dunand, A., Álvarez, I., Alos, J., Colinas, N., and Nash, R. D. (2014). “An evaluation of sampling methodology for assessing settlement of temperate fish in seagrass meadows”. In: *Mediterranean Marine Science* 15.2, p. 338. DOI: 10.12681/mms.539.

Spalding, M. D., Fox, H. E., Allen, G. R., Davidson, N., Ferdaña, Z. A., Finlayson, M., Halpern, B. S., Jorge, M. A., Lombana, A., Lourie, S. A., Martin, K. D., McManus, E., Molnar, J., Recchia, C. A., and Robertson, J. (2007). “Marine Ecoregions of the World: A Bioregionalization of Coastal and Shelf Areas”. In: *BioScience* 57.7, pp. 573–583. DOI: 10.1641/B570707.