**SUPPLEMMENTARY MATERIALS**

**A roadmap for the restoration of Mediterranean macroalgal forests**

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**Supplementary Table S1.** Fertility knowledge of the most common *Cysotseira sensu lato* species. Fertility and sterility periods and the first fertility (ages or size) are detailed for the most common *Cysotseira sensu lato* species. The locality and depth of the sampled populations and the source of information are also detailed. The references list is provided.

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| **Source** | **Species** | **Locality** | **Depth (m)** | **Fertility** | **Sterility** | **First fertility** |
| Gómez-Garreta et al., 2000 | *Gongolaria algeriensis* | Iberian Peninsula | <1 | Summer to winter | Summer and Winter | No data |
| Gómez-Garreta et al., 2000 | *Ericaria amentacea*  | Iberian Peninsula | <1 | From spring until autumn | No data | No data |
| Present study; Gòmez-Garreta et al., 2000 | *Gongolaria barbata* | Balearic Islands | <1 | More abundant in spring and early summer than other times in the year | No data | 1 year |
| Marzocchi et al., 2003 | *Gongolaria barbata* | Italy, north Adriatic, Laguna di Venezia | <0,5 | March to June | No data | No data |
| Gómez-Garreta et al., 2000; Gómez-Garreta t al., 1982 | *Ericaria brachycarpa* | Balearic Islands | 0-20 | From October to May, receptacles more developed from February to May)  | Rest period during summer | No data |
| Gómez-Garreta et al., 2000 | *Ericaria brachycarpa* | Iberian Peninsula | 0-20 | All year | No data | No data |
| Hoffmann et al.,1992 | *Ericaria brachycarpa* | Corsica (Calvi) |  4 | More abundant in March and June, and less abundant in October (only data for this months) | No data | No data  |
| Gómez-Garreta et al., 2000 | *Cystoseira compressa* | Iberian Peninsula, Balearic Islands | 0-3 | From April to November with a peak in July and August | No data | < 1 year |
| Present Study | *Cystoseira compressa* | Catalonia | <1 | May-August | No data | < 1 year |
| Falace et al., 2005 | *Cystoseira compressa* | Golf of Trieste (Izola, Slovenia) | 0-2  | May-July | No data | < 1 year |
| Gómez-Garreta et al., 1982 | *Cystoseira compressa* | Balearic Islands | <1 | April to September with a peak in July and August | October to May | < 1 year |
| Gómez-Garreta et al., 2000; Gómez-Garreta et al., 1982 | *Ericaria crinita* | Balearic Islands | <1 | From autumn until early spring (October to May) with a peak at the end of the winter | April to August, individuals reduced to basal parts | 1 year |
| Present study; Teruel 2019; de Silva 2019 | *Ericaria crinita* | Catalonia | <1 | All year, receptacles best developed and more abundant from April to December with two peaks: April to June and September to November | No data | 1 year |
| Pardi et al., 2000 | *Cystoseira humilis* | Tuscany, Italy | <1 | April and July (only data for April and July) | January | 2 years |
| Gómez-Garreta et al., 2000 | *Cystoseira humilis* | Iberian Peninsula, Balearic Islands | <1 | Spring and summer | No data | No data |
| Present study | *Ericaria mediterranea* | Catalonia | <1 | July and August | October-May | No data |
| Gómez-Garreta et al., 2000 | *Ericaria mediterranea* | Catalonia and Balearic Islands | <1 | Spring and summer | No data | No data |
| Capdevila et al., 2015 | *Ericaria zosteroides* | Catalonia and Columbretes Islands | >15 | March and April | No data | 7 years |
| Gómez-Garreta et al., 2000 | *Ericaria zosteroides* | Iberian Peninsula, Balearic Islands | >15 | Spring and summer | No data | 7 years |
| Serio, 1994; Serio, 1995 | *Ericaria zosteroides* | Sicily, Italy | 23-30 | May to July (immature conceptacle in February and empty in August) | September to January | 7 years |
| Gómez-Garreta et al., 2000 | *Gongolaria elegans* | Iberian Peninsula | No data | All year, receptacles best developed and more abundant in spring | No data | No data |
| Gómez-Garreta et al., 2000; Gómez-Garreta t al., 1982 | *Gongolaria elegans* | Balearic Islands | <1 | Autumn to spring with a peak in spring. | Summer (July and August, individuals reduced to thick trunks. Rest period from early summer to early autumn) | No data |
| Present study | *Gongolaria elegans* | Catalonia | <1 | May to August |   | Between 1 or 2 years |
| Medrano et al., 2020 | *Gongolaria elegans* | Catalonia | 5-15m | End of May to August with a peak in June and July |   | < of 4,5 cm |
| Gómez-Garreta et al., 2000 | *Cystoseira foeniculacea* | Iberian Peninsula, Balearic Islands | <1 | Spring and summer | No data | No data |
| Gómez-Garreta et al., 2000 | *Cystoseira foeniculacea* f. *latirramosa* | Balearic Islands | ~30 | No data | No data | No data |
| Gómez-Garreta et al., 2000 | *Cystoseira foeniculacea* f. *tenuiramosa* | Balearic Islands | <1 | Summer | No data | No data |
| Gómez-Garreta et al., 2000 | *Gongolaria sauvageauana* | Iberian Peninsula | 0-15 | All year, less abundant in autumn | No data | No data |
| Serio, 1994 | *Gongolaria montagnei* | Sicily, Italy | 15-22 | April to July | No data | Between 6 and 7 years |
| Gómez-Garreta et al., 2000 | *Cystoseira montagnei* | Iberian Peninsula, Balearic Islands | 0-30 | Spring and summer | No data | No data |
| Gómez-Garreta et al., 2000 | *Cystoseira montagnei* var. *compressa* | Iberian Peninsula, Balearic Islands | >20 | Summer | No data | No data |
| Gómez-Garreta et al., 2000 | *Ericaria selaginoides* | Iberian Peninsula | 0-3 | All year, receptacles best developed and more abundant in spring and summer | No data | No data |

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