

Halophila ovalis plants' responses under laboratory condition

ABSTRACT

This study gave information on culturing of *Halophila ovalis* in laboratory. *Halophila ovalis* plants were collected from seagrass meadow of Punang Sari (04° 57.195'N and 115° 24.394'E) at Lawas, Sarawak, Malaysia and cultured under laboratory conditions using a 120 x 45 x 45 cm glass tank filled with 30 psu artificial seawater prepared from Ocean Pure synthetic sea salt and sandy beach sediment as a substrate. *Halophila ovalis* plant grew well, producing leaves variable in shape, size and colour in response to the created environment. *Halophila ovalis* plant produced oval, ovate to elongate leaves and these were associated with the plants distribution in the glass tank. Plants with oval leaves were located adjacent to the wall of glass tank while plants with elongated leaves occurred at the middle of glass tank. Observed variations in leaf shape and size were responses to the availability of light in the glass tank. Most *H. ovalis* plants possessed bright-green coloured leaves and plants also have leaves with purplish blotches. Under the culture system, *H. ovalis* plants could be sustainably grown with the replacement of 25% of the artificial seawater every six months.

Keyword: *Halophila ovalis*; Seagrass; Morphological variability; Laboratory condition; Culture