

### High Density Production of Seaweed Biomass in Korea

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Experimental study for high density production of seaweed biomass was carried out at three Saccharina culture grounds (Gijang, Tongyeong and Wando) in Korean coast from December 2011 to July 2012. After the young fronds have grown to 1-2cm in length, the seed strings are removed from the seed frame and attached to the main culture rope in one of several ways (insertion and winding of seed string). Popular method is to cut seed strings into ca. 3-4cm length which are then inserted at 30-50cm intervals into the twist of the main culture rope (long-line). In this study, seed strings are then inserted (10cm, 25cm and 50cm in interval) to or wound the main culture rope. Maximum production of Saccharina by the inserted interval of seed string were 80.6kg•wt•m<sup>-1</sup> in Gijang, 77.8kg•wt•m<sup>-1</sup> in Wando and 49.6kg•wt•m<sup>-1</sup> in Tongyeong in 10cm. Maximal production of seaweed biomass per hectare were 161,200kg in Gijang, 155,600kg in Wando and 99,200kg in Tongyeong respectively in legal culture system.