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## The economic seaweed aquaculture in China

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The aquaculture of seaweeds in China and the reduction of marine eutrophication with seaweed aquaculture were introduced in this paper. The history of seaweed cultivation in China was also included. The two types of the most important economic seaweeds, *Laminaria japonica and Undaria pinnatifida*, both of which were introduced into China in 20 century, triggered both the seaweed aquaculture and the marine aquaculture in China, so the techniques for the two seaweeds were described in detail, which include five parts: Spore collection and indoor cultivation of sporeling, sporeling transplantation, setting up cultivation raft in the field, cultivation management in the field, and harvesting. The second algal aquaculture industry which was developed in China was *Porphyra cultivation*. *Porphyra* is different from *Laminaria since Porphyra* has a very special character, being survived during desiccation. Thus, there are three ways for Porphyra aquaculture, fixed pillars, semi floating method and fully floating. The third algal cultivation industry is the *Gracilaria* which has been appreciated as a food and feed for culturing marine animals. The most important use of *Gracilaria*, however, is the production of agar. It is known that the finfish aquaculture waste production include solid wastes (uneaten food, feces) and dissolved metabolic wastes ( $CO_2$ ,  $NH_4$ ,  $PO_4$ ), the heavy eutrophication will greatly decrease the production of marine animal such as finfish and scallop, so at present time, the measures for the integrated cultivation of animal and seaweeds was strongly suggested.

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