

Market Scan Asia

Destruction and application of jellyfish

MMI
Merit Maritime Innovations



Destruction of jellyfish

- There is a regional cooperation programme on jellyfish in northeast Asia, coorganized by government and carried out by research organizations in Japan, Korea and China at national level. Activities under this program include both destruction and utilization of jellyfish. This program is looking for international cooperation in principle. However,
- Based on this program, Korea and Japan has been developing jellyfish eliminating technologies and products mainly for fishing industry. If foreign initiatives could be in position to receive funding from such an initiative, or if the initiative could be a supplier of technology to such programme will depend on if technology is advanced/better than Korean and Japanese.
- Other industrial sectors, such as power plant and tourism, have no regional or national program for eliminating jellyfish swarms. But there might be business possibility for a technology/product.
- *Nemopilema nomurai* is the main species that caused big trouble to other coastal industries.





❑ Japanese pump destruction unit



❑ Japanese destruction net unit in combination with trawl

Jellyfish as food

- *Jellyfish as food* is a tradition and well developed in China. *Rhopilema esculentum Kishinouye* is the main species, taking more than 80% of total jellyfish production for culinary uses. Price of raw/whole and salted is low. Processing keep developing gives consumer a large variety choice in a large range of price. Market for jellyfish is big and continuous increasing. Coastal jellyfish fishing production can not meet food market demand. Jellyfish farming, sea enhancement and importing are on-going as well. Processed jellyfish products have been exporting many other countries especially in Asia.
- Japan and Korea are using jellyfish as food as well although it is not tradition. In recent years, more and more attentions and R&D efforts to develop jellyfish food products have been taken place while solving jellyfish caused problems.



Jellyfish as resource

- *Amino acids:*
Only few research articles but no business information about market players and business for deriving amino acids from jellyfish in this region.
- *Collagen:*
There are mainly R&D activities on developing nutrition/health products based on both R&D organizations and companies in this region. Some research organizations and companies are mentioned in each country report. But the commercialization has not been well proved yet. Japanese and Korean cosmetic companies are leading group.
- *Fish feed additives:*
R&D and application for feed is not really started yet, except few research articles.



Jellyfish as resource cont.

■ *Other R&D and applications*

- Cosmetic and food & beverage additives R&D and applications in Korea;
- Soil conditioner and cosmetic R&D and application in Japan;
- R&D and commercial production of nutrition liquid/health drink, Chinese traditional medicine application, R&D on extracting jellyfish venom (toxin) and its pharmaceutical function study in China;





❑ Jellyfish as soil conditioner used to increase plant growth





□ Jellyfish cookies



□ Bath salt using jellyfish collagen

