Is seaweed the next superfood? Marine biology professor says seaweed boom is already here

SARAH PETZ

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SAINT JOHN • Did you know that you use seaweed pretty much every day?

The use of seaweed extract in everyday products, from orange juice to toothpaste, is driving a rapid global expansion in production, which has some researchers raising red flags over potential ecological, economic and societal impacts.

These issues were highlighted in a recent policy brief coauthored by Thierry Chopin, a professor of marine biology at the University of New Brunswick Saint John.

The policy brief, Safeguarding the Future of the Global Seaweed Aquaculture Industry, is the work of 30 researchers, from 21 institutions in nine countries.

It was produced through United Nations University, the academic and research arm of the United Nations, and the Scottish Association for Marine Science.

In the western world, seaweed aquaculture is not very well known, but globally, accounts for almost half of aquaculture production. In 2014, the industry was worth US\$6.4 billion.

"The rapid expansion of any industry can typically result in unforeseen ecological and socio-economic impacts, particularly in the early stages in new geographical areas, where policies to



Cultivation of the seaweed Saccharina in the Bay of Fundy. PHOTO: SUBMITTED

regulate and manage the industry are in their infancy," the briefing note says.

Chopin pointed out that seaweed extract is used in everything from toothpaste to orange juice.

"So there is an increased demand for product containing seaweed extract, and there is an increased demand in seaweed for human food consumption," Chopin said.

"People always say 'seaweed is the

next super food,' and I'm saying, when I talk with food scientists and food journalists, 'Well I'm tired of the next super food, why can we not be the present super food?'"

Chopin says he sees potential for the expansion of seaweed production in Atlantic Canada, in order to diversify aquaculture production here.

"We need to diversity aquaculture, because at the present time here we have a lot of salmon aquaculture," he said.

"But diversification is needed because it's a little dangerous to put all of your salmon eggs in one basket."

The brief was meant to highlight how quickly seaweed production is expanding, while noting some potential challenges or risks involved, he said.

These include the spread of disease.

"People are aware that animals can have disease, but seaweed, just like other plants, can have disease. So we have to be careful," he said.

The brief also raises concerns over the displacement and reduction of wild species of seaweed by non-indigenous species, if they're introduced for cultivation purposes.

"Just like agriculture ... some species are good and work well, then the industry has a tendency to introduce them to other regions," Chopin explained.

"But then there's issues with introduction of non-indigenous species. Do we introduce the species of interest, but do we also introduce other pests that come with it?"

The brief ends with eight recommendations.

They include the establishment of centres of research excellence in support of the sustainable development of the industry, incentives for long-term investment in the industry, and the development of detection tools and measures for disease prevention.