

## Seaweed

Having read the article on seaweed in the latest "Country Woman" I became quite intrigued by its content and decided to dig - or is that dive? – a little deeper.

The history of seaweed consumption is not new to Australia as researchers have found evidence that Indigenous Australians ate quite a wide range of seaweeds, such as bull kelp, which the Tasmanians prepared by drying, roasting and then long soaking.

Since the beginning of the last century newspaper articles about seaweed farming have appeared. One of the earliest, in 1910, was about one in Cornwall, England, but this was about collecting seaweed that was dumped on beaches in stormy weather.

Another article, the following year, described the methods used on a Japanese seaweed farm and gave many details of the culinary and other uses of seaweed there.

Then in 1919, Frank Farnell, a public servant, and for several years the chairman of the Fisheries Board, told how members of the Earnest Shackleton expedition to Antarctica had survived for months by supplementing their diet with seaweed. He went on to suggest that as there was such a wide variety of seaweeds around the Australian coast we needed to investigate how we could use them to form the basis for successful industries here.

By 1941 the CSIRO was investigating the commercial harvesting of seaweed for agar agar, a gelling agent used in meat canning and confectionary, amongst other things. Eventually a N.S.W. firm obtained a permit to create a seaweed farm on the Clarence River, in northern N.S.W., but there is nothing to show whether or not this went ahead or was successful.

In the 1950's harvesting kelp began on King Island, in the Bass Strait, where a local kelp industry still carries on today, but this relies on kelp washed up by storms, not by farming.

Now to today – seaweed farming over the last ten or so years has become the focus of interest for a number of reasons; marine vegetation is able to sequester carbon, helping to mitigate the effects of climate change and also a supplement made from certain seaweeds has been shown to reduce methane emissions from livestock – not just cows but sheep and goats too.

Seaweed and seaweed extracts are of great use to those who farm the land as it can contribute to soil health, regeneration of the land and growing nutrient dense food. It helps to break down complex nutrients into simpler forms, making them easier for plants to absorb, improve plant growth, increase resistance to stressors and enhance overall crop growth. It is also highly cost effective as a little, used regularly, can go a long way.

Seaweed fertiliser, because of its high concentration of growth-promoting hormones, leads to faster and healthier growth through the formation of stronger roots. It also promotes photosynthesis which results in a more efficient conversion of carbon dioxide into carbohydrates – better for the atmosphere.

One of the hormones, Auxins, improves plant resistance to frost and disease and also plant tolerance to climate stresses such as drought, salinity and extremes of temperature. Auxins also helps to produce foods that have a longer shelf life and keeps its natural freshness. When we eat these foods they can contribute to a more nutrient rich diet.

Liquid seaweed fertilisers sprayed on the leaves of plants help with healthy plant development as it helps to promote strong root growth, improved flower and fruiting as well as overall plant strength. It can also help the plant's ability

**to absorb water and nutrients from the soil whilst improving resistance to drought and disease.**

**That's just some of the things seaweed can do for plants! You should read what it can/may be able to do for our health! It may decrease the risk of developing heart disease, diabetes and certain types of cancer; it may support weight management; it may help with the function of the thyroid gland. As with all these things, you have to be careful – check with your doctor, don't have too much!**

**Seaweed has many other uses including extra health benefits; boosting proteins and nutrients in food; soaking up excess nutrients in waste water; creating new materials such as textiles and packaging; food additives; skin care. The list goes on.**

**Only now are we beginning to understand the potential of seaweed as something that we may be able to farm for its commercial usage.**