

which, by later investigators, does not appear to be confirmed to the full extent mentioned by the first recommenders in this complaint.

Of late, the bladder wrack, it seems, has been employed medically, to some extent in the United States, so that a brief description of this and some allied species may be desirable.

The genus *Fucus* belongs to the suborder *Fucoideæ* or *Melanosporeæ* of the natural order *Algæ*. As originally constituted by Linnæus, it embraced several genera which have been separated by later authors, and among which are the genera *Laminaria*, *Sargassum* and *Cystoseira*, the last-named having the thallus usually inflated into vesicles which often show a moniliform arrangement, while the vesicles of *Sargassum* are stipitate. *Fucus* has either a cylindrical (filiform) or flat, usually forking thallus, and the sporocarps, inflated and usually terminating the branches. In their fresh state they have an olive or brownish-green colour, becoming blackish on drying. Several species have portions of the thallus inflated so as to form hollow vesicles.

*Fucus vesiculosus*, Lin., attains the length of 1 to 3 feet, and has a flat thallus half to one inch wide, with the margin entire and a distinct midrib running the entire length of the thallus; the vesicles are always in pairs, one being placed on each side of the midrib, spherical or oblong globular in shape, and occasionally attaining the size of a hazelnut.. It grows on rocky sea shores of the Atlantic Ocean, near high-water mark, and in marshes which are occasionally overflowed by the tide. Formerly it was known by the name of *quercus marina*, or sea oak, its common English names being *bladder wrack*, *sea-wrack*, *sea-ware*, *kelpware* and *black tang*. In Scotland and other northern countries it is used in winter for feeding horses, cattle and sheep, and is eaten by deer when other food is scarce.

*F. nodosus*, Lin., knobbed sea-wrack, grows in similar localities, but at or near low-water mark. It attains a length of 4 to 6 feet, and has a narrower veinless frond, with the branches almost filiform at the base, the vesicles single in the center of the thallus, or frond, ovate in shape and usually quite large.

*F. serratus*, Lin., has a veined and serrate frond, and is destitute of vesicles.

*F. siliquosus*, Lin., s. *Cystoseira siliquosa*, Agardh, has a very narrow frond, two to four feet long, with short branches, articulated vesicles and lanceolate flattened sporocarps.

*F. natans*, Lin., s. *Sargassum bacciferum*, Agardh, the gulf-weed of the Atlantic Ocean, is often found in immense masses floating in the sea. Its frond is terete, with the branches linear and serrate and the vesicles globular and aculeate.

All these and many allied species appear to be very similar in their constituents, of which they contain mucilage, mannit, odorous