

## Short Communication

### CARRAGEEN: A LOCAL HABITATION OR A NAME?

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In a discussion of the gelatinous properties of a far-eastern marine alga (*Fucus tenax* = *Gloiopeltis tenax* (Turner) J. Agardh), Dawson Turner (1809) commented on the occurrence in Britain of similarly constituted species: "There are, indeed, few of the submersed Algae that are not possessed of some degree of viscosity, and many of our British Fuci will in great measure, if not entirely, melt, when boiled in water over a quick fire. Such is particularly the case with *F. ciliatus* (*Calliblepharis ciliata* (Hudson) Kiitzing) and *F. crispus* (*Chondrus crispus* Stackhouse), both which, on cooling, form into a gelatine resembling glue in appearance..." When he came to discuss *Chondrus crispus* in detail, Turner (1819) observed that this species will "...melt on boiling and afterwards harden into a gelatine, which I do not despair of seeing hereafter employed to useful purposes, though I have hitherto failed in my efforts to render it of service".

On October 22, 1829 the following advertisement appeared in the Dublin *Saunders' News-Letter and Daily Advertiser*: "Carrageen, or Irish Moss. Messrs. Butler having purchased a large quantity of the Carrageen or Irish Moss so much appreciated and recommended as a Dietetic Remedy for Invalids and as a substitute for Isinglas in making Blamonge, Jellies &c. are enabled to supply it to the Public at a price considerably lower than that at which it has hitherto been sold."; one can now only speculate as to the existence of a link between Turner's observations and the first commercial exploitation of *Chondrus crispus*. Clearly, however, the word carrageen had gained a certain currency in Ireland by 1829, though the notice cited above records the earliest example of its use which we have found. Jonathan Pereira (1840) proposed a name for the substance obtained from *Chondrus crispus*: "The mucilaginous matter (called by some writers *vegetable jelly*, by others *pectin*,) appears to me to be a peculiar substance, which I shall term *carrageenin*." This is now spelled carrageenan and the substance it represents is of such importance as an emulsifier and a stabiliser in the food and other industries that the origin of the word from which it was coined

is a matter of some interest. This subject was previously discussed, though very briefly, by Carruthers (1960) and Nodder (1961).

A standard work of reference, The Oxford English Dictionary (1933) states that the word is derived "From *Carrageen* near Waterford in Ireland, where it grows abundantly."; this Dictionary is a re-issue of Murray et al. (1884—1928) and the derivation in question first appeared in 1888. The 11th edition of The Encyclopaedia Britannica (Chisholm, 1910) offers, however, an alternative source: "Irish Moss, or Carrageen (Irish *carrageen*, "moss of the rock"), a sea-weed (*Chondrus crispus*) which grows abundantly along the rocky parts of the Atlantic coast of Europe and North America." In order to assess these different derivations it is necessary to survey the literature relating to *C. crispus* in the years close to its introduction as an item of diet. A note which George Halahan<sup>1</sup> (1830) contributed to a short-lived Dublin journal opened with the statement: "The *Fucus crispus* having become an article of such general use since my introduction of it now upwards of two years ago, and being so much recommended by eminent medical practitioners, it may not perhaps be uninteresting to communicate something more of its natural history and medicinal properties than are generally known..." The editor of the journal, Michael Donovan<sup>2</sup>, added the remark: "We have not the least doubt that some important uses will still be discovered of this fucus..." Halahan did not use the word carrageen but a work also published in Dublin in 1830 carried the statement: "An alga, found I believe chiefly on the shores of the counties of Clare and Sligo, and called *Carrageen Moss*, has been lately much used in this country..." (Barker and Montgomery, 1830)<sup>3</sup>. At the same time a London journal published a brief communication: "Sea-Moss or Weed. This article, under the names of carrageen, and carragaheen, is become a favourite dietetic remedy..." (Anonymous, 1830a). Some pages later, in connection with the same topic, we read that "Mr. Todhunter<sup>4</sup>, of Dublin, to whom we are indebted for our first acquaintance with this article, informs us that it is, at some seasons of the year, very abundant on the Clare coast." (Anonymous, 1830b). Following the appearance of two laudatory notes in the same journal (Anonymous, 1832a,b), carrageen quickly became a widely accepted medication, not least on the continent, with some 20 publications concerning its use listed by Herzer (1836).

The first derivation of the word which we have been able to locate was

<sup>1</sup> George Augustus Frederick Halahan (1790—1866) graduated Licentiate of the Apothecaries' Hall, Dublin in 1812 and M.D. of the University of Glasgow in 1835; he was for many years apothecary to several Dublin prisons.

<sup>2</sup> Michael Donovan (1790—1876) was Professor of Chemistry, Materia Medica and Pharmacy at the Apothecaries' Hall, Dublin. "Donovan's solution" was widely used in dermatology until well into this century.

<sup>3</sup> As William Montgomery was an obstetrician the comment may, presumably, be attributed to Francis Barker, Professor of Chemistry in Trinity College, Dublin from 1809 to 1850

<sup>4</sup> Thomas Harvey Todhunter, a Dublin businessman, was a close relative of the phycologist William Henry Harvey (cf. n.7).

provided by the same Michael Donovan (1837) who edited the journal carrying Halahan's note. Donovan, who is likely to have been aware of the facts of the matter, wrote: "Carrageen. This is the Irish name of the *fucus crispus*, commonly called Irish moss, introduced from Ireland as an article of food within the last ten years."<sup>5</sup> However, O'Reilly's Irish-English Dictionary (1821), described on the title page as containing "the Irish names of our indigenous plants", does not give *carraigín* though it does include, for example, *duilliasg* (dulse) and *sleabhacan* (sloke); the word is also absent from O'Donovan's (1864) edition of the dictionary. As far as we can establish, the name first appeared in Hogan et al. (1900) where it is rendered *carraicin*<sup>6</sup> with *cairrgin* given as a synonym; the latter may be related to the word *cairgain* which O'Reilly's Dictionary translates simply as "an herb", without any indication of a marine association. Donovan's statement remains, therefore, uncorroborated.

The earliest reference we are aware of which derives carrageen from a place-name is found in David Landsborough's (1849) account of *C. crispus*: "as the chief supply at first came from Carrageen in Ireland, it was called *Irish moss* or *Carrageen*." William Henry Harvey<sup>7</sup> is joint dedicatee of Landsborough's book and as the statement quoted above remained without significant alteration in the second and third editions of 1851 and 1857 it can be reasonably concluded that Harvey, who could also be expected to have been in possession of the facts, accepted the derivation, if indeed he did not provide it: in the preface to the first edition of his book Landsborough thanks Harvey who, he wrote "gave me council, allowed me to take aid from his publications, and solved my doubts respecting plants I sent to him". Harvey did not use the word carrageen in his account of *C. crispus* in Mackay's *Flora Hibernica* (1836), but later when discussing the species in his *Phycologia Britannica* (1846) he commented: "This plant is the *Carrigeen* or *Irish Moss* of the shops... A few years ago it was a fashionable remedy in consumptive cases, and the collection and preparation of it for market afforded a small revenue to the industrious peasantry of the West Coast of Ireland, where it first came into use". Harvey's and Landsborough's statements, if taken together, imply the existence of a locality named Carrageen or Carrigeen on the west coast and while several such exist they appear to apply, with one exception, viz. Carrigan Head (*Ceann an Charraigin*), Co. Donegal, to isolated rocks and, as far as we can establish, there is no

<sup>5</sup> This quotation is also given in Murray's Dictionary as an example of the use of the word carrageen but the statement: "This is the Irish name of the *fucus crispus*" has unaccountably been omitted.

<sup>6</sup> The authority cited for the usage is Cameron, J. (1883) *Gaelic Name of Plants (Scottish and Irish)*, Blackwood, Edinburgh and London, but Cameron actually wrote (p. 102), "Irish moss, known in the Western Highlands by the Irish name *an carraceen*, as the chief supply used to come from Carrageen in Ireland".

<sup>7</sup> William Henry Harvey was born in Limerick in 1811. He developed an interest in the algae in his early twenties and soon became recognised as an authority on the group. From 1844 until his death in 1866 Harvey was associated with Trinity College, Dublin, first as Curator of the Herbarium and later as Professor of Botany.

evidence to associate any of these localities with the early harvesting of *C. crispus*. So, while both Donovan and Harvey would very likely have known the background to the introduction of carrageen in the late 1820s, it is difficult to see how the varying derivations can be reconciled.

As far as we can ascertain, the first work to mention a locality in Waterford as the source of the name was that of Mayne (1860): "Carragaheen Moss/Carrageen Moss. *Med.* A species of moss, or sea-weed, found on the rocks and shores of northern Europe, and in Carragaheen<sup>8</sup>, near Waterford, Ireland..."<sup>9</sup> Power and Sedgwick (1879) incorporated Mayne's work in a new lexicon, and, under the entry "Carrageen moss", stated: "It is named after a place near Waterford, where it grows."; there is no reference to Carragaheen. Murray's derivation, as already mentioned, appeared some 10 years later and The English Dialect Dictionary (Wright, 1898) similarly asserted that the plant is "Named fr. Carragheen (or Carrigeen, in Post Office Guide), a place near Waterford".<sup>10</sup> This derivation was given further approval when Newton (1931), borrowing apparently from Murray, stated that "The name comes from Carragheen, near Waterford, Ireland, where *Chondrus crispus* abounds".

From the evidence available, it is not at present possible to answer the question posed in the title of this note, but the derivation of the word carrageen from a Co. Waterford placename would appear to be quite untenable.

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<sup>8</sup> Mr. Kenneth Bale, Ordnance Survey Office, Dublin has kindly informed M.E.M. that Carragaheen is not found as a Co. Waterford placename. Nor could such a name be found to occur elsewhere in Ireland despite a reasonably thorough search on our part. Mayne possibly obtained this derivation from an earlier source which we have been unable to locate; as regards his *modus operandi* he states simply: "I confess to have drawn information from every source within reach and suited to my purpose."

<sup>10</sup> Carrigeen is quite a common placename in Co. Waterford but *C. crispus* could not occur at any of these localities because none is coastal.

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