

other of the species that have been already described, so that duplicate names may be eliminated, and our nomenclature placed on such a basis that equivalent forms—whether species, so-called subspecies, or varieties, or even less pronounced forms—may be compared together from the several regions, as evidence of community of origin, or otherwise, or to indicate possible or probable sources of derivation.

At an early period in the century preceding the present one, long before questions of origin had arisen, and long before it was thought of any consequence to mankind to ascertain the possibilities of productive culture on our northern coasts, Linnæus's "Tour in Lapland" and the "Flora Laponica" had excited an interest in these little northern plants from the systematic botanist's point of view. And, while, subsequently, the Scandinavians themselves and the botanists of Russia, have been active in making known the vegetation of the northern verges of Europe and Asia, so the northern shores of America and the Greenland coast have been visited by whaling vessels, whose officers have, season after season, carried specimens to British botanists; but the principal botanical work on our shores has been accomplished by the numerous exploring expeditions sent out from time to time by England and the United States, whose collections have been elaborated in the most careful manner and the results systematised and published for general use.

More recently, substantial work has been done at the meteorological stations for observation on Hudson Strait, and especially by Dr. Robert Bell, scientist and medical officer of the expedition to Hudson Bay in 1884, a list of whose botanical collections, identified by Prof. Macoun, has been published.

Work still remains to be done by observers who have opportunity, and it may be thus summarised:—To collect and dry specimens in as many conditions or stages of growth as possible, carefully noting (1) dates of collection, (2) kinds of soil, whether sandy, loamy, clayey, peaty (these greatly affecting moisture and temperature), (3) distance from sea shore, elevation above sea-level, (4) surroundings of locality or particular spot where the plant is gathered, as regards protection from cold, or conditions of shelter favourable to prolonged humidity of atmosphere or to accumulation of warmth in time of sunshine. These particulars are specially mentioned, not only because they are intrinsically of special importance; but because we had scarcely any systematic observation of them, until the establishment of the stations of observation on Hudson Strait. It is to be hoped that what has been begun so well by the Hudson Strait observers, will be continued and developed by those who have opportunity from time to time, to add to the information already acquired. These regions are so seldom visited in the ordinary course of travel, and the collection and preservation of specimens is attended with so many difficulties, that even the veriest scraps are welcome to the home botanist. How much more valuable are specimens, carefully selected so as to show modifications of form, and thus serve to determine questions of specific identity or distinction, or those collected at different times during the seasons of sprouting or budding, leaf-development, flowering, ripening of seeds, and autumn withering, or fall of leaf or browning of evergreens, with dates carefully recorded, so as to show the beginning, progress and ending of the annual growing period for vegetation.

In the following tabulation of Mr. Payne's observations, the several columns after that containing the name of the species give, —