

The following list will show an assemblage of species which accompanies the *Pyrola* alliance on this continent (Maryland and Virginia) and in Europe (Denmark).

Maryland and Virginia.....	Denmark,
<i>Chimaphila umbellata</i>	<i>C. umbellata</i> ,
<i>C. maculata</i>	<i>M. uniflora</i> ,
<i>Pyrola secunda</i>	<i>P. secunda</i> ,
<i>P. chlorantha</i>	<i>P. chlorantha</i> ,
<i>P. rotundifolia</i>	<i>P. rotundifolia</i> ,
<i>P. elliptica</i>	<i>P. elliptica</i> ,
<i>Monotropa lanuginosa</i>	<i>M. lanuginosa</i> ,
<i>M. uniflora</i>	<i>M. uniflora</i> ,
<i>Goodyera pubescens</i>	<i>G. repens</i> ,
<i>Corallorrhiza odontorhiza</i>	<i>C. innata</i> ,
<i>Cypripedium acaule</i>	
<i>Orechis spectabilis</i>	<i>O. spectabilis</i> ,
<i>Hieracium venosum</i>	<i>H. venosum</i> ,
<i>Vicia caroliniana</i>	<i>V. sylvatica</i> ,
and a little farther north:	
<i>Linnaea borealis</i> var. <i>americana</i>	<i>L. borealis</i> ,
<i>Trientalis americana</i>	<i>T. europaea</i> .

To this list, which only shows some parallel species or genera, may be added several other plants which are also associated with the Pyrolaceae in the vicinity of Washington (D.C.), for instance: *Epigaea*, *Gaultheria*, *Mitchella*, *Obolaria*, *Cunila*, *Gerardia*, *Leptandra*, etc.

From this enumeration may be seen that while the Pyrolaceae have kept unchanged, their associates *Linnaea* and *Trientalis* represent geographical races, the others being species totally distinct.

It is thus an indisputable fact that the Pyrolaceae do occur in their typical form in both Worlds, besides that they, at least some of them, may acquire a more or less modified structure in the various districts where they occur, in the manner of "geographical races."

In view of these facts it seems difficult to explain the present distribution of the Pyrolaceae in any other way than that they have been produced "not in one area alone," but in several. For if the family had originated on this continent and later on migrated to Europe, we might be entitled to expect that some of their associates would have accompanied them; of such we have only *Linnaea* and *Trientalis* both of which represent geographical races, however. But referring to the other plants, none of these has ever been found in Europe. Would it not be natural to expect that at least the allied genera *Epigaea* and *Gaultheria*, showing the same habit as the Pyrolaceae and extending far north on this continent, might have accompanied the Pyrolaceae on their migration to Europe? Westward, on the other hand, we find in Japan *Epigaea asiatica* Maxim., *Mitchella undulata* Sieb. et Zucc., and *Monotropa uniflora*.

It is really astonishing to observe how such an alliance of a few closely related plants have been able to preserve their habit and structure at such enormous distances, as shown according to the longitudes and latitudes, within which they exist.

If the species had been alpine and arctic at the same time, their distribution would be explained in quite a different way, as being the result of migration during the glacial epoch. But now that they are mainly lowland types, their habitat being mostly the wooded belts, the problem of their range calls for another explanation, viz.: the probability of their development from more than a single area.