The plants in the flats were examined periodically during the early part of the spring of 1952. On May 3, 1952, the following observations were made. In two of the treated flats there was definite evidence of the inhibition of the crown-rot fungus. In lot A, flat 25210, treated with 250 c.c. of the culture filtrate of *P. charlesii*, six out of nine plants were still healthy; whereas in the control flat of lot A only three of the nine plants were still unattacked. More striking results were obtained in lot C. In the flat, 25208, treated with 500 c.c. of the culture filtrate of *P. brevi-compactum*, only two out of the nine plants were dead, whereas in the control three plants were dead and two were dying (Fig. 1, L and R).

It is therefore evident that, at the right concentration, the metabolic products of *P. charlesii* and *P. brevi-compactum*, produced in Czapek-Dox medium are able to inhibit the development of the crown-rot fungus, *S. delphinii*.

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Elminius modestus in France

Elminius modestus Darwin was first recorded from Holland in 1946¹ and has since spread over most of the coastline of the Low Countries². Little information is available, however, on the presence of this immigrant barnacle in France, and the following observations may therefore be of interest.

In September 1950 *E. modestus* was present in large numbers on intertidal rocks and molluscs at Wimereux, Pas de Calais. Unfortunately, no further records could be obtained at that time; but in September 1953 further observations were made at Le Havre and at various points along the coast of northern Brittany. At this time *E. modestus* was abundant on rocks and jetties at Le Havre. With the exception of a single specimen at Port St. Hubert, it could not be found in the Rance estuary, an apparently ideal environment for the species, nor at any of the localities visited in the Côtes du Nord. In northern Finistère, however, the species was abundant in the Roscoff area and throughout the Rade de Brest, and was present at all intervening localities examined. South of the Rade de Brest only occasional individual specimens could be found, usually after prolonged searching, but these were recorded for as far south as Lorient. The observations made in Brittany are summarized in the accompanying map.

The observations presented here indicate that the spread of *E. modestus* from Belgium had passed the French frontier before the summer of 1950. The colonization at Le Havre may have resulted from a continuation of this westward extension of range, but the observations made in Brittany indicate that a separate centre of colonization has been established in northern Finistère. How and when this establishment was accomplished are unknown, but Dr. P. Drach informs me that *E. modestus* was settling in large numbers at Roscoff in the summer of 1952. The immigrant barnacle is now a prominent member of the littoral fauna of northern Finistère and has penetrated the muddy estuaries (for example, at Morlaix) beyond the limit of any other species of

Distribution of *Elminius modestus* Darwin in northern Brittany in September 1953.
●, Abundant; ▲, present in considerable numbers but not abundant; △, present as isolated individuals only; ○, absent

barnacle. The large size of some of the specimens found (up to 17 mm. carinorostral diameter in the Aber-Benoit and up to 14 mm. at other localities) is probably ascribable to highly favourable environmental conditions rather than to the age of the barnacles³. The presence of isolated individuals at considerable distances from the main area of settlement may be attributed to transportation on coast-wise shipping, but it is unlikely that such specimens can reproduce sufficiently to build up new centres of immigration⁴.

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Determination of Absolute Configuration by Laue Photographs

WHEN a non-centrosymmetric crystal is studied by using X-rays of the wave-length λ a little shorter than the K - or L -absorption edge (λ_K^Z or λ_L^Z) of some atom Z in the crystal, the hkl and $\bar{h}\bar{k}\bar{l}$ reflexions should, in general, have different intensities. This effect was first observed by Coster, Knol and Prins^{1,2}, using zinc sulphide and gold $L\alpha_2$ radiation. The same method was used by Peerdeman, van Bommel and Bijvoet³, for sodium-rubidium tartrate and zirconium $K\alpha$ radiation, in their beautiful confirmation of the correctness of the Fischer convention for optically active molecules. Bijvoet has also pointed out possible applications of the method, for example, in phase determination for non-centrosymmetric compounds⁴. The practicability of such applications is limited, however, by the difficulties of the technique.

It seems to have been assumed in practice that the X-radiation used must be that of a characteristic spectrum; but it is by no means always easy to make an X-ray target of what may be the most suitable element and then to obtain from it characteristic radiation of sufficient intensity for crystal investigation. Neither the gold nor the zirconium targets