

to whole roe. It is said that Japanese consumers "eat with their eyes" and the emphasis on high visual appeal for Atlantic roe would seem to corroborate this. The practice of "piecework" in Canadian plants which tends to emphasize volume production was singled out as particularly detrimental to good quality.

The company also pointed out differences in quality between the various production regions in Canada. The southern production (Nova Scotia) was said to be somewhat better than the northern production (New Brunswick). This was attributed largely to biological differences and environmental factors rather than handling/processing practices. Roe produced from herring taken on the German bank were said to have the best quality largely because of the prevalence of large and more uniform size roe sacs. (10 grams is the minimum size favoured by Japanese processors.) Northern roes were also said to be "softer" than southern roes and therefore less useful for the production of the firm crunchy end products favoured by Japanese consumers. Concern was also expressed that herring in the Bay of Fundy are becoming too small.

With respect to specific quality problems with Canadian roe the company focussed on the problem of broken roe sacs. Broken roe is a major problem for Japanese processors in that it can only be used as an ingredient for lower grade end products such as pickles. However, processors purchase raw material on the basis of higher value whole sacs and the proportion of broken roe is not factored in. It was noted that excess damaged roe could be caused by too much pressure during plate freezing. This problem could be solved by reducing pressure from the plates and using shallow depth cartons to ensure more rapid freezing.

The group was shown samples of Irish roe. It was pointed out that Irish roe is more uniform in size compared to Canadian product where considerable variation was said to exist. Size differences in Canadian herring are attributed to the different characteristics of fish schools between one region and another. In the Irish product there was also a low proportion of broken roe - and a better "crunch" due to greater freshness. It was noted that unlike Canadian roe the Irish product is produced in winter which greatly limits quality problems. The Irish production is also much smaller enabling faster handling and grading. Also, the Irish don't use piecework methods in their processing plants.