

Developing

Aquaculture



Salmon eggs where the eye is visible. Ovulation and egg-laying are stimulated by the injection of "Ovaprim," which is a reproductive agent prepared from peptide hormones and used with salt- and fresh-water fish.

(Syndel Laboratories Ltd.)



Although aquaculture is a new industry in Canada, it holds considerable promise for successful development. Techniques derived from biotechnology will undoubtedly help bring about a major breakthrough in the next few years.

Syndel Laboratories Ltd. of Vancouver, British Columbia, has mastered the art of stimulating ovulation and egg-laying in farmed fish. The company has also recently marketed a very sophisticated product called Ovaprim, used mainly with carp, salmon and catfish. A fourth-generation product prepared from peptide hormones (godanotropin and dopamine), Ovaprim is the result of years of research. The use of extracts of pituitary hormones to control the reproductive process has become a thing of the past, and today Syndel Laboratories is one of the world leaders in new techniques used to induce ovulation in salt- and fresh-water fish.

Another company in British Columbia, Microtek Research and Development Ltd., is interested in developing diagnostic tests and vaccines for various diseases that can affect fish in aquaculture farms. Microtek has developed a vaccine, approved by Agriculture Canada, as well as a diagnostic test for various fish diseases. This research and development firm has also developed a monoclonal antibody to identify *Renibacterium salomoninarum*, a bacterium responsible for kidney disease in salmon.

Royal Pacific Sea Farms Ltd. of Vancouver, British Columbia, is concentrating its efforts on growth hormones, in particular recombinant somatotropin. With this hormone, the company aims to improve the productivity of fish farms.

Tissue culture laboratory used to carry out diagnostic tests of viral diseases in fish.

(Microtek Research and Development Ltd.)