

*Research and Development*

There is a real need for alternative irrigated crops to the traditional ones such as sugar beets, edible garden crops like beans, peas, corn, carrots, onions, and so forth. The alternative is needed because of suddenly increased costs of specialty equipment in some of those earlier irrigated crops.

With suitable new grain varieties developed for irrigation, greater dollar returns are possible using standard grain seeding, cultivating and harvesting machinery. For example, there are now about 170,000 acres seeded to soft white spring wheat in the irrigation areas of southern Alberta. Most seed varieties for this soft white spring wheat come from Idaho; our growth season is just too short for these varieties. In addition, these imported varieties eventually become infected with mildew mutations that require a new southern Alberta variety. There is only one place they can possibly be developed and that is in the Lethbridge research station. Tremendous yields of this particular crop of soft white spring wheat of over 100 bushels per acre make the research worthwhile and necessary.

Soybean production under irrigation has never been good enough, at least in western Canada. New varieties for our latitudes are needed and needed now. The Faba bean has probably the greatest potential of any of our legumes presently under irrigation because of two important factors. First of all it has a very high protein content, being well over 30 per cent. Secondly, the nitrogen-fixing characteristics are the best of any of our legumes. But improved irrigated varieties are needed.

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The same argument can be made for irrigated varieties of malting and feed barleys. There is a growing demand for the white malting varieties instead of the traditional blue malting varieties. There will always be a demand in the cattle feeding country of southern Alberta for high yielding barley grown by irrigation. In general there will be an increased demand for R and D in cereal breeding just to keep ahead of the disease problems in cereal grains grown with irrigation. As irrigation costs, energy costs and land costs continue to increase, it is only a matter of time until our systems of irrigation will have to change. By that I mean the methods of physically distributing the water. Research and development will point the way from present, open systems, which are very wasteful of water and very inefficient, to totally enclosed systems both for the total distribution system and for the individual farm.

The Lethbridge research station is a unique institution in Canada in many ways, not the least of which is its opportunity to serve Alberta's continually growing irrigation. This station's research budget should not be restrained.

On a related research subject I want to say a few words in support of the VIDO concept, meaning the Veterinary Infectious Diseases Organization. This is a new organization based in Saskatoon working in conjunction with the Western Veterinary College at the University of Saskatchewan. It has been set up for research on cattle, hogs and poultry in the disease field. It began in September 1975 and will eventually be staffed by about 50 research scientists and veterinarians.

[Mr. Hargrave.]

VIDO is already deeply involved in calf and pig scours, especially in those matters that need intensive research. In Alberta alone calf scours cost Alberta cattlemen \$17 million in 1974. Losses to the Canadian beef and dairy industry comes to \$74 million per year, which amounts to about \$8.67 for each live calf born.

Here is how this worth-while institution has been financed so far: \$2.2 million from the Devonian group of charitable foundations in Calgary; \$1.87 million from the government of Alberta; \$200,000 per year for five years of operation from the government of Saskatchewan, and it is in its third year now. In addition, the government of Saskatchewan has put up another \$50,000 for expenses this year. I should point out that the Devonian grants are on a matching grant basis only up to 1982. Another \$1.25 million will be on a declining matching basis. In addition there is some financing from other sources. For example, the Saskatchewan Veterinary Association gives \$1,000 a year; the Manitoba Veterinary Association \$200; the Alberta Veterinary Association \$5,000; the Alberta Egg and Fowl Marketing Board \$10,000; the B.C. Swine Breeders \$250; and the B.C. Cattlemen \$5,000. The Alberta Cattle Commission, which is the organization that makes the check-off from every cattle animal sold in Alberta, has subscribed \$70,725 in ongoing projects up to now. It is very likely that they will continue to support VIDO in future on a project by project basis.

VIDO now needs operating funds. Considerably more are needed, something over \$1 million a year for the next five years. Up until now the federal funding has been very, very limited. Surely the need here for funding is beyond question. Cattlemen fully recognize this by subscribing their own research dollars.

I want to close, Mr. Speaker, with a very brief tribute to a fine Canadian scientist who retired at the end of last year. I am referring to Dr. Bert Migicovsky. I want to recognize the contributions of Dr. Migicovsky who retired at the end of the year as director general of research in the Department of Agriculture, or he may have been known as the assistant deputy minister of research. At any rate, he was one of Canada's top agricultural scientists. His regular appearances before the Standing Committee on Agriculture over the last five years have become one of the highlights of that committee every year. His broad knowledge based on such wide experience, always expressed so forcibly, made those meetings very special occasions. There is no question but that we should salute him for a job well done at his retirement.

**Some hon. Members:** Hear, hear!

**Mr. Frank Maine (Parliamentary Secretary to Minister of Public Works and Minister of State for Science and Technology):** Mr. Speaker, first of all I would like to join with the hon. member for Medicine Hat (Mr. Hargrave) in paying tribute to Dr. Migicovsky, the recently retired assistant deputy minister of the research branch of Agriculture Canada, for the extremely fine job he has done there. He helped me a great deal in setting up my tours of the research laboratories of the