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CPRC Update

PUTTING RESEARCH INTO PRACTICE

The poultry industry in Canada has made tremendous strides in virtually every respect. Improved production efficiencies, enhanced management practices, and superior disease detection, treatment & prevention can all be traced back to research. Clearly, past investments in research have paid enormous dividends. Continued investment in research is key to the future success of the poultry industry. In order to maximize the return on an investment in research, many would argue that one should only support research that has obvious industry application. However, it may not always be obvious how a particular research project will translate into improvements a farmer will see in the barn. Often, it is the amalgamation of seemingly unrelated research discoveries that eventually leads to these improvements. Take, for example, a study at the University of Manitoba that is looking at enzyme supplements for broiler feed. The enzymes are being used to break down otherwise indigestible components of corn, soybean and wheat in common broiler diets because it was discovered that the presence of these indigestibles in the gut can promote the growth of several deleterious organisms. The study found that birds fed diets supplemented with the enzymes performed better when challenged with necrotic enteritis compared to birds that did not receive the supplement. The mix of enzymes developed during this research is now commercially available to the poultry industry through Canadian Bio-Systems Inc. (which was an active supporter of the research program) and is being used in some low-dose antibiotic feeding programs. The success of this study is rooted in a range of research efforts that came before it; fundamental knowledge of immunology, botany and nutrition were applied to enzyme chemistry, gut microbiology and etiology to achieve results that could ultimately be used by industry. In other words, this research could not have been put into practice were it not for the range of discoveries that preceded it.

The Innovation Continuum

Research can be described as occurring along an "Innovation Continuum". The Continuum begins with 'primary' research - that which pushes back the frontiers of knowledge and provides us with conceptual understanding of the world around us. Further along the Continuum, 'applied research' directs this fundamental knowledge towards more tangible end results. Next is the 'innovation' stage that leads to products and processes that may be of use to the end user. Finally, 'application' is the point at which the research actually impacts the end user. From an industry standpoint, 'application' is perhaps the most interesting, but, as illustrated in the example above, a successful research program requires support at all points along the Innovation Continuum.

Striking a balance

The recently released 'National Research Strategy for Canada's Poultry Sector" (for details, go to www.cp-rc.ca/news.php#Strategic_Planning) outlines an approach that helps push research towards the application stage while maintaining a healthy balance of all types of research along the Continuum. The approach is based on articulating target outcomes for each research priority area. For example, one of CPRC's research priorities areas is 'Food Safety'. In the Strategy document, the industry has listed a number of outcomes it would like to see from food safety research. Research proposals submitted to CPRC, therefore, will be reviewed in light of their potential to help move the program towards one or more of these target outcomes. Research anywhere along the Innovation Continuum is eligible for support, provided it can demonstrate that potential. This approach will focus CPRC research programs on the work required to reach industry's target outcomes and at the same time provide support for discovery research.

Assessing next steps

CPRC has, along with various government and industry partners, supported a number of research projects. In some cases, research that yielded promising results was not continued after the original studies were completed. CPRC is therefore considering, in consultation with project leaders, what steps are required to move these projects along the Innovation Continuum towards industry application. If there is value in doing so, CPRC will facilitate that next step, whether it be more research, field trials, extension or other activities.

The future success of the poultry industry depends on innovations from research. CPRC continues to work towards a strong poultry research program that balances industry's desire for quick application of innovations with the need to foster discoveries that will fuel the innovations of tomorrow.

For more details on these or any other CPRC activities, please contact The Canadian Poultry Research Council, 350 Sparks Street, Suite 1007, Ottawa, Ontario, K1R 7S8, phone: (613) 566-5916, fax: (613) 241-5999, email: info@cp-rc.ca, or visit us at www.cp-rc.ca.

The membership of the CPRC consists of Chicken Farmers of Canada, Canadian Hatching Egg Producers, Turkey Farmers of Canada, Egg Farmers of Canada and the Canadian Poultry and Egg Processors' Council. CPRC's mission is to address its members' needs through dynamic leadership in the creation and implementation of programs for poultry research in Canada, which may also include societal concerns.