Livestock Systems Department

**Title**
Targeting key microbiological and residue issues for an expanding dairy industry

**Abstract**
Milk production in Ireland is expected to increase by 50% from 2009 to 2020 (DAFM, 2011). Improvements in milk quality are needed to maximise competitiveness and marketability of Irish dairy product. With potentially a large number of new entrants (1,500 projections) and expansion within farm units (50 % expected) there is the possibility that milk quality standards on farms may decline. New entrants in many instances have limited knowledge in the production of quality milk and expanding herd sizes will also add technical issues for those farmers expanding. There is a need to address the potential issues with new entrants by firstly investigating quality standards on new entrant farms over the last number of years and secondly putting in place procedures and training to address any issues. From a industry point of view there are economic savings if milk collection time could be extended to 3 and 4 days. Indications from recently studied milk quality trends in Ireland indicate that milk quality deteriorates during early and late lactation which happens to coincide with less frequent milk collections. A definitive study on milk storage times and cooling efficiency would provide guidelines for industry. A number of milk residues have been detected in products manufactured in Ireland in the last number of years. Continued monitoring of processor milk supplies and guidance to the industry is required to continue the down ward trend in the levels of Trichloromethane residue detected in farm bulk milk. A second residue, Quaternary Ammonium compounds (QAC) has been detected in product and little knowledge is available on the source of this residue. Furthermore, with the expanding dairy industry opportunities arise for commercial companies to exploit the market with new cleaning and disinfectant agents, therefore continued monitoring of these new products would also be prudent. Key tasks of this project include 1. New entrants; 2. Milk storage; 3. Milk residues; 4. Detergent cleaning products; 5 Dissemination of results

**Project Leader:** David Gleeson

**Programme/Subprogramme/RMIS Number:**
AGRIP – Moorepark Livestock Systems-Precision Farming Systems-6643

**Start Date:** 1/1/14  **End Date:** 31/12/18