**RESEARCH PUBLICATIONS FROM**
**THE DAIRY NUTRITION & SILAGE FERMENTATION LABORATORY –**
**UNIVERSITY OF DELAWARE**
**(Last 10 years only) 2002 - 2012**


Teller, R.S., R.J. Schmidt, L.W. Whitlow, L. Kung, Jr. 2012. Effect of physical damage to ears of corn before harvest and treatment with various additives on the concentration of mycotoxins, silage fermentation, and aerobic stability of corn silage. J. Dairy Sci. 95:1428-1426.

Der Bedrosian, M.C., K.E. Nestor, L. Kung, Jr. 2012. The effects of hybrid, maturity, and length of storage on the composition and nutritive value of corn silage. J. Dairy Sci. 95:5115-5126.

Young, K.M., J.M. Lim, M.C. Der Bedrosian, L. Kung, Jr. 2012. Effect of exogenous protease enzymes on the fermentation and nutritive value of corn silage. J. Dairy Sci. 95:6687-6694.

Reich, L. J., and L. Kung, Jr. 2010. Effects of combining *Lactobacillus buchneri* 40788 with various lactic acid bacteria on the fermentation and aerobic stability of corn silage. Anim. Feed Sci. Technol. 159:105-109.

Hu, W., M. E. Persia, and L. Kung. Jr. 2010. In vitro ruminal fermentability of a modified corn cultivar expressing a thermotolerant α-amylase. J. Dairy Sci. 93:4846-4849.

Schmidt, R. J. and L. Kung, Jr. 2010. The effects of *Lactobacillus buchneri* with or without a homolactic bacterium on the fermentation and aerobic stability of corn silages made at different locations. J. Dairy Sci. 93:1616-1624.

Kung, Jr., L., E. C. Stough, E. E. McDonell, R. J. Schmidt, M. W. Hofherr, L. J. Reich, and C. M. Klingerman. 2010. The effect of wide swathing on wilting times and nutritive value of alfalfa haylage. J. Dairy Sci. 93:1770-1773.

Hu, W. R. J. Schmidt, E. E. McDonell, C. M. Klingerman, L. Kung, Jr. 2009. The effect of *Lactobacillus buchneri* 40788 or *Lactobacillus plantarum mtd-1* on the fermentation and aerobic stability of corn silages ensiled at two dry matter contents. J. Dairy Sci. 92:3907-3914.

Schmidt, R. J., W. Hu, J. A. Mills, and L. Kung, Jr. 2009. The development of lactic acid bacteria and *Lactobacillus buchneri* and their effects on the fermentation of alfalfa silage. J. Dairy Sci. 92:5005-5010.

Hu, W. and L. Kung, Jr. 2009. Effect of dietary ratio of Na:K on feed intake, milk production and mineral metabolism in mid-lactation dairy cows. J. Dairy Sci. J. Dairy Sci. 2009 92: 2711-2718.

Klingerman, C. M., W. Hu, E. E. McDonell, M. C. DerBedrosian, and L. Kung, Jr. 2009. An evaluation of exogenous enzymes with amylolytic activity for dairy cows. J. Dairy Sci. 92:1050-1059.

Mari, L. J., R. J. Schmidt, L. G. Nussio, C. M. Hallada, and L. Kung, Jr. 2009. An evaluation of the effectiveness of *Lactobacillus buchneri* 40788 to alter fermentation and improve the aerobic stability of corn silage in farm silos. J. Dairy Sci. 92: 1174-1176.

Schmidt, R. J., M. Emara and L. Kung, Jr. 2008. The use of a quantitative real-time polymerase chain reaction assay for identification and enumeration of *Lactobacillus buchneri* in silages. J. Appl. Micro. 105:920–929.

Kung, Jr., L., P. Williams, R. J. Schmidt, and W. Hu. 2008. A blend of essential plant oils used as an additive to alter silage fermentation or used as a feed additive for lactating dairy cows. J. Dairy Sci. 91: 4793-4800.

Kung, Jr., L., B. M. Moulder, C. M. Mulrooney, R. S. Teller and R. J. Schmidt. 2008. The effect of silage cutting height on the nutritive value of a normal corn silage hybrid compared to brown midrib corn silage fed to lactating cows. J. Dairy Sci. 91: 1451-1457.

Mulrooney, C. N., and L. Kung, Jr. 2008. The effect of water temperature on the viability of silage inoculants. J. Dairy Sci. 91: 236-240.

Kizilsimsek, M., R. J. Schmidt, and L. Kung, Jr. 2007. Effects of a mixture of lactic acid bacteria applied as a freeze dried or fresh culture on the fermentation of alfalfa silage. In press J. Dairy Sci. 90:5698–5705.

Reddish, M. A., and L. Kung, Jr. 2007. The effect of feeding a dry enzyme mixture with fibrolytic activity on the performance of lactating cows and digestibility of a diet for sheep. J. Dairy Sci. 90:4724–4729.

Hu, Wenping, Limin Kung Jr., and Michael R. Murphy. 2007. Relationships between dry matter intake and acid–base status of lactating dairy cows as manipulated by dietary cation–anion difference. Anim. Feed Sci. Technol. 136:216-225

Kung, L., Jr., R. J. Schmidt, T. E. Ebling and W. Hu. 2007. The effect of *Lactobacillus buchneri* 40788 on the fermentation and aerobic stability of ground and whole high moisture corn. J. Dairy Sci. 90:2309-2314.

Kleinschmit, D. H. and L. Kung, Jr. 2006. A meta-analysis of the effects of *Lactobacillus buchneri* on the fermentation and aerobic stability of corn, grass and small grain silages. J. Dairy Sci. 89: 4005-4013.

Kleinschmit, D. H. and L. Kung, Jr. 2006. The effects of *Lactobacillus buchneri* 40788 and *Pediococcus pentosaceus* R1094 on the fermentation of corn silage during various stages of ensiling. J. Dairy Sci. 89: 3999-4004.

Kleinschmit, D. H., R. J. Schmidt, and L. Kung, Jr. 2005. The effects of various antifungal additives on the fermentation and aerobic stability of corn silage. J. Dairy Sci. 88:2130-2139.

Ebling, T. L., and L. Kung , Jr. 2004. A comparison of processed conventional corn silage to unprocessed and processed brown midrib corn silage on intake, digestion, and milk production by dairy cows. J. Dairy Sci. 87:2519-2527.

Kung, L., Jr., C. L. Myers, J. M. Neylon, C. C. Taylor, J. A. Lazartic, J. A. Mills, and A. G. Whiter. 2004. The effects of buffered propionic acid-based additives alone or combined with microbial inoculation on the fermentation of high moisture corn and whole-crop barley. J. Dairy Sci. 87: 1310-1316.

Neylon, J. M., and L. Kung, Jr. 2003. Effects of cut height and maturity on the nutritive value of corn silage for lactating cows. J. Dairy Sci. 86:2163-2169.

Kung, L., Jr., K. A. Smith, A. M. Smagala, K. M. Endres, C. A. Bessett, N. K. Ranjit, and J. Yaissle. 2003. Effects of 9,10 anthraquinone on ruminal fermentation, total tract digestion and blood metabolite concentrations in sheep. J. Anim. Sci. 81:323-328.

Kung, L., Jr., C. C. Taylor, M. P. Lynch, and J. M. Neylon. 2003. The effect of treating alfalfa with *Lactobacillus buchneri* 40788 on silage fermentation, aerobic stability, and nutritive value for lactating dairy cows. J. Dairy Sci. 86:336-343.

Ranjit, N. K., C. C. Taylor, and L. Kung, Jr. 2002. Effect of *Lactobacillus buchneri* 40788 on the fermentation, aerobic stability, and nutritive value of maize silage. Grass and Forage Sci. 57:1-9.

Kung, L., Jr., M. A. Cohen, L. M. Rode, and R. J. Treacher. 2002. The effect of fibrolytic enzymes sprayed onto forages and fed in a total mixed ration to lactating dairy cows. J. Dairy Sci. 85:2396-2402.

Mills, J. A. and L. Kung, Jr. 2002. The effect of delayed filling and application of a propionic acid-based additive on the fermentation of barley silage. J. Dairy Sci. 85:1969-1975.

Taylor, C. C., N. J. Ranjit, J. A. Mills, J. M. Neylon, and L. Kung, Jr. 2002. The effect of treating whole-plant barley with Lactobacillus buchneri 40788 on silage fermentation, aerobic stability, and nutritive value for dairy cows. J. Dairy Sci. 85:1793-1800.

Taylor, C. C., and L. Kung, Jr. 2002. The effect of *Lactobacillus buchneri* 40788 on the fermentation and aerobic stability of high moisture corn in laboratory silos. J. Dairy Sci. 85:1526-1532.