



UNITED SOYBEAN BOARD-SUPPORTED ANIMAL NUTRITION RESEARCH ON SOYBEAN MEAL FROM TRAIT-ENHANCED SOYBEANS

(AS OF NOVEMBER 2013)

Project 9393 – Metabolizable energy of trait-enhanced soybean meal in broilers

Animal Nutrition Researcher: Carl Parsons, Ph.D. and Xi Chen—University of Illinois

Result: Study found trait-enhanced soybean meal delivered 7.6% more metabolizable energy than control. Work was presented at the July 2012 Poultry Science Association meeting and published in the *Poultry Science Journal*.

Project 2387 – Further evaluation of trait-enhanced soybean meal in broilers

Animal Nutrition Researcher: Carl Parsons, Ph.D. and Xi Chen—University of Illinois

Result: Study confirmed previous work and found that the gain:feed ratio for broilers on the trait-enhanced soybean meal diet improved nearly 5.0% over birds on the control diet. Work was presented at the national Poultry Science Association meeting and published in the *Poultry Science Journal*.

Project 0305 – Metabolizable energy of trait-enhanced soybean meal in broilers

Animal Nutrition Researchers: William A. Dozier, III, Ph.D. and Kurt Perryman—Auburn University

Result: Study found trait-enhanced soybean meal delivered 8.7% more metabolizable energy than control. Work was presented at International Poultry Scientific Forum, published in the *Poultry Science Journal* in addition to being presented at Poultry Science Association Annual Meeting.

Project 1305 – Broiler performance trial on trait-enhanced soybean meal

Animal Nutrition Researchers: William A. Dozier, III, Ph.D. and Kurt Perryman—Auburn University

Result: Diets were adjusted for energy parity. Despite these adjustments, birds fed trait-enhanced soybean meal showed a 2.3% improvement in feed conversion ratio (FCR) and a 1.7% increase in breast yield. Foot pad lesions decreased by 60.5%. All results were statistically significant. Work was presented at the Poultry Science Association Annual Meeting and published in the *Poultry Science Journal*.

Project 2312 – Piglet performance on trait-enhanced soybean meal

Animal Nutrition Researchers: David Holzgraefe, Ph.D. and Victor Perez, Ph.D.—ADM Alliance Nutrition, Inc.

Result: Average daily gain (ADG) and average daily feed intake (ADFI) of piglets fed the trait-enhanced soybean meal diet improved 6.7% and 9.7%, respectively, compared to the control diet. These results were statistically significant. Results were presented in July 2013 at the American Society of Animal Science national meeting.

Project 2315 – Metabolizable energy of trait-enhanced soybean meal in grower-finisher swine

Animal Nutrition Researcher: David Holzgraefe, Ph.D. and Victor Perez, Ph.D.—ADM Alliance Nutrition, Inc.

Result: Digestible energy and metabolizable energy in grower pigs fed the trait-enhanced soybean meal diet improved 16.0% and 16.9%, respectively, compared to the control soybean meal diet. Plus digestible energy and metabolizable energy in finisher pigs fed the trait-enhanced soybean meal diet improved 10.8% and 8.5%, respectively, compared to the control soybean meal diet. Results from both growers and finishers were statistically significant and were presented in March 2013 at ASAS-Midwest.

Questions? Please contact Dr. Nick Bajjalieh, Integrative Nutrition, Inc., 217 428-5766, nlb@4ini.com, Greg Engelke, Cornerstone Resources, LLC, 651 636-8034, cornerstoneresourcesllc@gmail.com or Philip Lobo, SmithBucklin/United Soybean Board, 314 579-1582, plobo@smithbucklin.com.

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Project	Researcher	Affiliation	Criteria Evaluated	Major Findings
9393: Broiler energy trial	Carl Parsons, Ph.D. and Xi Chen	University of Illinois	Metabolizable Energy (TMEn)	▲ 7.6%
2387: Broiler performance trial	Carl Parsons, Ph.D. and Xi Chen	University of Illinois	Gain:Feed Ratio	▲ 5.0%
0305: Broiler energy trial	Bill Dozier, Ph.D. and Kurt Perryman	Auburn University	Metabolizable Energy (TMEn)	▲ 8.7%
1305: Broiler performance trial	Bill Dozier, Ph.D. and Kurt Perryman	Auburn University	Feed Conversion Ratio (FCR) Breast Yield Foot Pad Lesions	▲ 2.3% ▲ 1.7% ▼ 60.5%
2312: Piglet performance trial	Victor Perez, Ph.D. and David Holzgraefe, Ph.D.	ADM Animal Health & Nutrition	Average Daily Gain (ADG) Average Daily Feed Intake (ADFI)	▲ 6.7% ▲ 9.7%
2315: Metabolizable energy in pigs	Victor Perez, Ph.D. and David Holzgraefe, Ph.D.	ADM Animal Health & Nutrition	Growers: Digestible Energy Metabolizable Energy	▲ 16.0% ▲ 16.9%
			Finishers: Digestible Energy Metabolizable Energy	▲ 10.8% ▲ 8.5%