

Preface and Acknowledgements

As technology in the U.S. ethanol industry continues to evolve, so does the development of new corn co-products with different nutritional profiles, characteristics, and feeding applications compared with conventional dried distillers grains with solubles (DDGS). Many of these new corn co-products are beginning to be produced in large quantities and are being used domestically and exported to customers in various countries around the world. Of these new corn co-products, corn fermented protein co-products containing at least 50% crude protein and spent yeast have become of interest to many aquaculture, poultry, and swine nutritionists and animal producers. However, there is limited information regarding the nutritional characteristics and feeding value of corn fermented protein co-products for various animal species. This has resulted in some confusion of how they differ from conventional DDGS sources and other types of high protein distillers dried grains (HP-DDG) co-products. Therefore, the purpose of this publication is to provide a concise summary of current research-based information on the use of corn fermented protein co-products and other new corn co-products in animal feeds. This will enable the U.S. Grains Council leadership and representatives to engage and educate current and prospective customers to help them achieve the greatest nutritional and economic benefits when using these co-products in diets for all animal species.

To achieve this goal, the U.S. Grains Council asked Dr. Gerald (Jerry) Shurson, Professor in Animal Nutrition in the Department of Animal Science at the University of Minnesota, to serve as the author of this “Use of Corn Fermented Protein and Other Novel Corn Co-Products in Animal Feeds Users Guide”. Dr. Shurson is a leading expert on the nutritional value and feeding applications of DDGS and these new corn co-products. He has led an active corn co-product research program for the past 24 years, has collaborated extensively with many other corn co-product researchers, and has served as a technical nutrition consultant for the U.S. Grains Council in all export market regions around the world since 1998.

This Novel Corn Co-Products Users Guide was written using all of the peer-reviewed scientific journal publications that are currently available. In addition, some industry technology providers and corn co-product marketers have provided unpublished research data and information for use in this U.S. Grains Council Users Guide. These entities have granted permission to use their data and have reviewed and approved its use in this publication. Special thanks to Drs. Ryan Mass, Mallorie Wilken, and Ms. Jackie Lissolo at ICM, Inc., Dr. Scott Tilton at The Andersons, Dr. Jennifer Aurandt and Mr. Trevin Kennedy at Marquis Energy, and Drs. Kevin Herrick, Melissa Jolly-Breithaupt, and Mr. Derek Balk at POET for graciously providing unpublished data and granting permission for its use in this publication.