Abstract

Background: addition of distillers dried grains with solubles (DDGS) in lactation diets may contribute to productive performance of lactating sows of different parities. Objective: the objective of this study was to determine the effects of feeding diets containing different levels of DDGS on productive performance of lactating sows of different parities. Methods: a total of 245 sows were divided into 3 parity groups of 1 to 2, 3 to 5, and over 5 parities. Within each parity group, sows were allotted to 1 of 4 dietary treatments that were prepared by inclusion of 0, 10, 20, and 30% DDGS in lactation diets. Diets were fed to sows during the whole lactation period. Results: average piglet weaning weight tended (quadratic, p<0.10) to increase by feeding diets containing increasing levels of DDGS to lactating sows of 3 to 5 and over 5 parities. Likewise, increasing levels of DDGS in diets tended (quadratic, p<0.10) to increase average piglet weight gain in all sow parity groups. The improvement of average piglet weaning weight and average piglet weight gain was the greatest when sows of 3 to 5 parities were fed diets containing 20% DDGS or when sows of over 5 parities were fed diets containing 10% DDGS compared with other dietary treatments. Feeding diets containing different levels of DDGS had no negative effects on other productive performance of lactating sows, regardless of parity. Conclusions: DDGS can be included up to 30% in diets fed to lactating sows of different parities.

Keywords
Corn byproducts, ethanol byproducts, multiparity, pigs, reproductive traits, swine nutrition.