Initial targeted investigation into key esters within the aroma profiles of barley and sorghum beers.

Elisabeth Dieckman-Meyer, Samantha Tucker, and Drew Budner

Department of Chemistry, Coastal Carolina University

The increase in consumer interest in gluten-free products has resulted in a wide range of new products coming into the market. This includes new beers produced from grains other than barley. In an effort to characterize the chemical differences between beers brewed from barley and sorghum a targeted study of the concentration of several ester compounds was undertaken. Previous research has shown that the differences between the aromas of these two beer types lies not in a set of different compounds but in the relative amount of several key chemicals. Reported here is the initial results of a series of brews from either sorghum or barley extracts in which the concentration of six esters was determined. All six of these esters are known to provide pleasant flavors such as citrus or apple. In addition, the effect of four different yeast strains is also investigated.