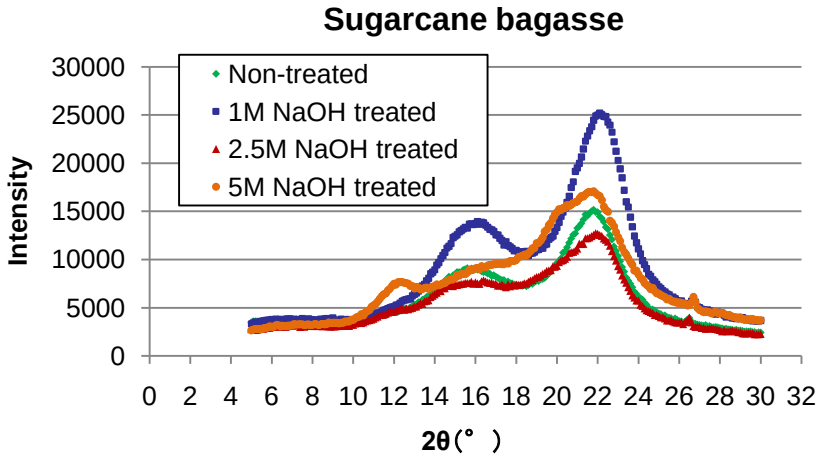
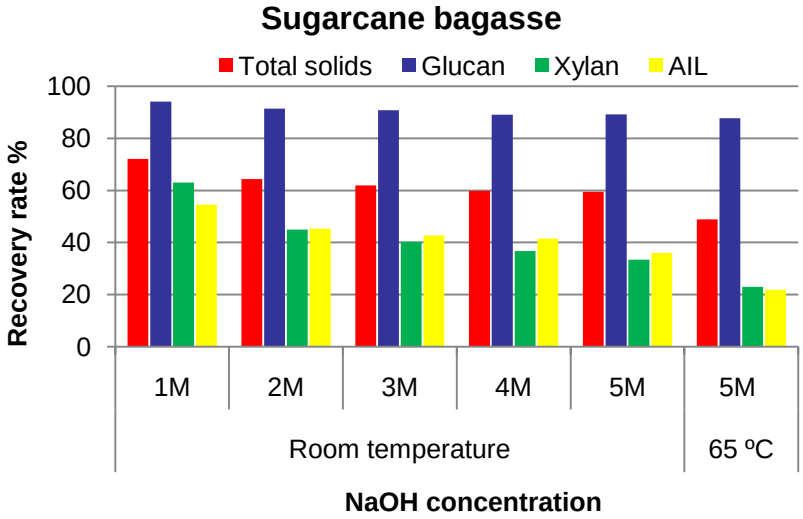
（独）農研機構食品総合研究所　糖質素材ユニット、徳安　健、武　龍

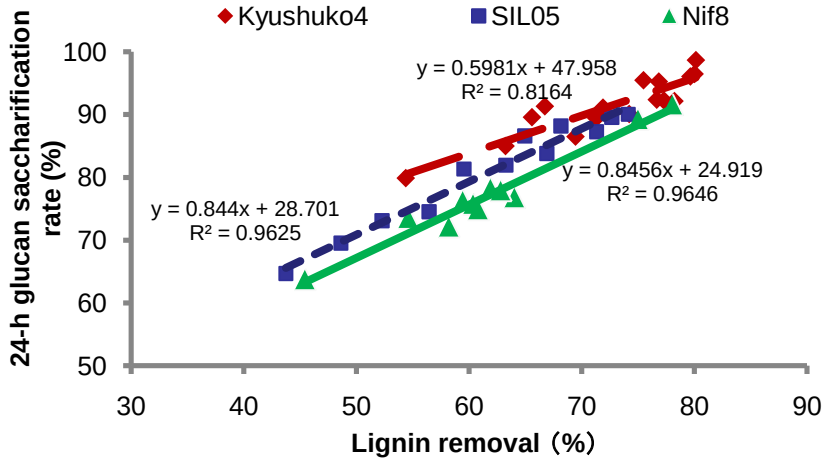
Structural and compositional changes and improvement in glucan saccharification rate of LTA treated bagasse

X-ray diffraction analysis



Compositional analysis





Correlation between glucan digestibility and lignin content of LTA pretreated sweet sorghum (Kyushuko4 and SIL05) and sugarcane (Nif8) bagasse

◆ LTA pretreatment can effectively remove the resistance of lignocellulosic bagasse to enzymatic hydrolysis owing to the crystallinity of cellulose and the existence of hemicellulose and lignin, while preserving the majority of glucan. Under appropriate pretreatment conditions, the cellulose to glucose conversion rate may reach as high as 90%.