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Genomic Resources

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Abstract

The fastest growing use of maize is for the production of fuel ethanol using the enzymatic conversion of corn starch to glucose and then to ethanol as well by converting the cellulosic (non-food) parts of maize to ethanol. However for the production' of ethanol from maize to be economically viable, improvements need to be made not only in maize yield and agronomic performance, but also in properties such as grain quality with respect to starch conversion, lower lignin content and modified cell wall structure. This chapter highlights the new advances in functional genomics and related technologies that have the potential to make maize more amenable to ethanol production.