

PRODUCTION OF SPIRIT FROM CERRADO FRUITS

Santos, H.T.D¹, Corrêa, A.E.D.N¹, Bughi, D.H.C², Vilela, D.M³

UFGD – Universidade Federal da Grande Dourados (Rodovia Dourados/ Itahum, Km 12 – Unidade II). daniellevilela@ufgd.edu.br

The Cerrado fruits have unique flavors and high contents of sugar, protein, and vitamins. They are often consumed in the form of juices, liqueurs, ice cream, jams and other products, which are sold in popular fairs. The interest in these fruits have reached various segments of society, such as, farmers, industrial, commercial, research institutions, universities and many others. The fruits of Guavira (*Campomanesia* sp.) and Seriguela (*Spondias purpurea* sp.) are an excellent substrat for fermentation by yeast *Saccharomyces cerevisiae* and represent a great potential for the production of spirit. Such process may result a larger value to products from fruits of the Cerrado bringing economic benefits and creating a major interest in researches in the local region. The present study was intended to produce spirit from the fruits of Seriguela and Guavira using different types of isolates from *S. cerevisiae*, previously selected. Four isolates of *S. cerevisiae* were tested among them; (LNFA11 - commercial strain; LEVSIL16 and LEVSIL5 – isolates taken from the grass Piatã silage; LEVFRC29 – isolate obtained from cerrado fruits).All isolates were cultivated on a simple batch system in 30°C for Guavira and Seriguela broth in 16° Brix. Cultive samples were collected every 12 hours for the reading of total soluble solids (Brix) and Cell counting using the Neubauer chamber. At the end of process the fermented broth was distilled in copper alembic. The fermentation process initiated with inoculum of 10³ cells/mL, reaching population counting peaks at 10⁶ cells/mL. Total consumption of sugars got an average of 72 hours cultivation, at this time the fermentation broth was distilled in copper still. The alcohol content of yeast-distilled after the distillation was 43° GL. The beverage is in chemical ripening stage. The chromatographic analyzes will be performed to quantify higher alcohols and acids that can influence the taste of it. The results so far were promising and will serve as a basis for future trials with other fruits of the Cerrado and they will empower the development of a commercial product for the region.

Key-Words: fermented-distilled beverage, *Saccharomyces cerevisiae*, seriguela, guavira.

Financial Support: Fundect