

**TITLE:** PROSPECTION OF ENZYME PRODUCERS YEAST FROM SPONTANEOUS COCOA FERMENTATIONS FROM THE SOUTH OF BAHIA

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**ABSTRACT:**

The interest in cocoa cultivation is mainly related to the use of its almonds for chocolate production. After harvesting, almonds are fermented, where complex biochemical reactions of microbial origin occur leading to the death of the germ in the seed. Furthermore, sugar and proteins are hydrolyzed, enzymes and substrates are released and phenolic compounds are diffused, getting in contact with enzymes through the release of reducing sugar, indispensable to the flavor formation during cocoa roast. The search for microorganisms who produces hydrolytic enzymes have a great importance for selection of lineages that have attributes to be used as starters of the fermentation process. In this study, enzymatic tests for pectinase, protease, amylase and lipase were made in a total of 273 yeasts from the collection of laboratory of environmental monitoring (UESC). Among tested yeasts, 4.8% presented positive activity for protease, 4% for pectinase, 1.5% for amylase, 40.3% for lipase and 4% for esterase. Three strains showed valuable characteristics for cocoa fermentation and were used as starter in laboratory assays. Our study shows yeasts with potential to be used by cocoa producers as starter strain.

**Keywords:** Fermentation, yeasts, cocoa, starter.

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