

DEVELOPMENT OF A LARGE CAPACITY ORANGE BAGASSE DEHYDRATOR

Eduardo A. Rincón¹ *, Bernd Weber²

1: Programa de Energía, Universidad Autónoma de la Ciudad de México
San Lorenzo 290, Col Del Valle, 03100 Ciudad de México
Postal address
eduardo.rincon@uacm.edu.mx <https://www.uacm.edu.mx>

2: Facultad de Ingeniería, Universidad Autónoma del Estado de México
weber@uaemex.mx

Abstract

The dehydration of agricultural products with solar energy has proven to be very effective, reliable and profitable. For very large scales - of the order of 100 tons per day to dehydrate - technical problems represent a great challenge. In particular, it is intended to dispense with fossil support for air heating, with the option of using biogas from the anaerobic formation of part of the bagasse. This report presents the details of the project and the results obtained in the development of a solar dehydrator for 150 metric tons of bagasse of orange, byproduct of an orange juice packaging company. Dehydrated bagasse is used as a feed component for cattle.

Keywords: Solar Dehydration, Solar Thermal Food Processing