

---

- Mujer, milpa y sustentabilidad

---

**Mujer, Milpa y Sustentabilidad: Una Mirada Distinta de los Socio Agroecosistemas**

gabriela rodriguez licea

[!\[\]\(666e09182d4cd268646ea700ea60dcdf\_img.jpg\) PDF \(English \(España\)\)](#)

Componente	Contenido (%)
Humedad	12.35
Extractivos	5.55
Celulosa	33.71
Hemicelulosa	9.65
Holocelulosa	43.36
Lignina	47.53
Cenizas	5.48
Proteína Bruta	3.71
Fibra Bruta	77.17

**Caracterización química de la cáscara del fruto de Jatropha curcas**Rosa María Rodríguez-Calle, Jesús Suárez-Hernández, Jesús Manuel Iglesias-Gómez,  
Gabriela Rodríguez-Licea[!\[\]\(003082e50e3009141f59bd5df831749f\_img.jpg\) PDF \(English \(España\)\)](#)

## Chemical characterization of the fruit shell of *Jatropha curcas*

Rosa María Rodríguez-Calle

<https://orcid.org/0000-0003-3394-2144>

Jesús Suárez-Hernández

<https://orcid.org/0000-0002-8232-1251>

Jesús Manuel Iglesias-Gómez

Universidad de Matanzas

<https://orcid.org/0000-0002-9501-1938>

Gabriela Rodríguez-Licea

<https://orcid.org/0000-0003-2529-3387>

DOI: <https://doi.org/10.28940/terra.v40i0.958>

Keywords: cellulose, esters, fiber, hemicellulose, lignin

### Abstract

*Jatropha curcas* L. has a great potential which lies in its high oil content for the production of biodiesel. To extract *J. curcas* oil, it is necessary to peel the seeds, and since this coproduct represents 2.0% of the total weight, it is important to look for options for its use. The previous step to any action in this sense is to know its bromatological values and the presence of total phenolic compounds. During a period of two years (2017-2018) at the Experimental Station of Pastures and Forages Indio Hatuey a study was carried out on the determination of the chemical composition of the fruit shell of *J. curcas*. The objective of this work was to characterize the chemical composition of the fruit shell of *J. curcas*. The samples were obtained randomly from a plantation with more than two years of established from ripe fruits dehydrated in the sun. The values obtained were, in percentage, humidity 12.35; ashes 5.48; crude protein 3.71; crude fiber 77.17; cellulose 33.71; hemicellulose 9.65; holocellulose 43.36; lignin 47.53; extractive 5.55; Na 0.78; K 4.51; Ca 0.59; Si 0.08; S 0.03; P 0.72 and total phenolic compounds 1.89. The results indicate the fibrous components as predominant, the contents of acceptable minerals, and the contributions of crude protein discrete. The high phenolic composition suggested the need to deepen, from the qualitative and quantitative point of view, the organic elements that compose it and determine if there is presence of phorbol esters on it.

Componente	Contenido (%)
Humedad	12.35
Extractivos	5.55
Celulosa	33.71
Hemicelulosa	9.65
Holocelulosa	43.36
Lignina	47.53
Cenizas	5.48
Proteína Bruta	3.71
Fibra Bruta	77.17

 PDF (Español (España))

Published

2022-08-29

Issue

[Vol 40 \(2022\)](#)

Section

Mujer, milpa y sustentabilidad

