

研究简报

## 云南红壤上蓖麻栽培的施肥技术研究

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**摘要** 以云南北亚热带气候下的红壤旱地为试验条件, 选用蓖麻品种TCO-202为试验材料, 依据蓖麻的营养特性和吸肥规律, 结合云南红壤氮、磷、钾的含量与利用效率, 制定适合云南红壤上蓖麻栽培的施肥技术研究方案。运用普通过磷酸钙 (750 kg/hm<sup>2</sup>) 和腐熟农家肥 (15 000 kg/hm<sup>2</sup>) 做基肥, 以不施任何基肥为对照, 并以尿素的3种施肥水平 (300 kg/hm<sup>2</sup>, 450 kg/hm<sup>2</sup>, 600 kg/hm<sup>2</sup>) 做追肥处理, 对当年生和第2年宿生蓖麻的产量作综合分析。试验结果表明: TCO-202在云南红壤上栽培, 以 15 000 kg/hm<sup>2</sup>有机肥作底肥, 450 kg/hm<sup>2</sup>尿素作追肥的产量最好, 当年生和宿生都获得最高的种子产量, 当年生蓖麻产量为 2 403.35 kg/hm<sup>2</sup>, 第2年宿生蓖麻产量为 4 550.02 kg/hm<sup>2</sup>。

**关键词** [栽培](#) [施肥技术](#) [蓖麻](#) [红壤](#)

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## A Fertilizing Technology Research on the Red Soil Cultivation of Castor (*Ricinus communis*) of Yunnan Province

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### Abstract

This text regards the dry land with red soil under the northern subtropics climate as experimental term of Yunnan, and chooses the variety TCO-202 of Castor (*Ricinus communis*) as test material. Then, according to the nutrition characteristics and fertilizer absorption rule of Castor (*Ricinus communis*), to establish a research program of fertilizing technology under the condition of red soil cultivation of Castor (*Ricinus communis*) with considering the content and utilization efficiency of nitrogen (N), phosphorus (P) and potassium (K) in the red soil of Yunnan province. It takes ordinary superphosphate and decayed farm manure as basal manures respectively without fertilizing any basic manure before as contrast, and treat urea as complementary fertilizer in three fertilizing quotas (300 kg/hm<sup>2</sup>, 450 kg/hm<sup>2</sup>, 600 kg/hm<sup>2</sup>), to analyze the annual yields and perennial yields in the second year of Castor (*Ricinus communis*) comprehensively. Eventually, the results indicate that TCO-202 will hit its best yields and the highest seedling yields both in annual and perennial under the condition of red soil cultivation with taking 15 000 kg/hm<sup>2</sup> organic manure as basic manure and 450 kg/hm<sup>2</sup> urea as complementary fertilizer, the annual yields of Castor (*Ricinus communis*) will hit 2 403.35 kg/hm<sup>2</sup> while the perennial yields in the second year hitting 4 550.02 kg/hm<sup>2</sup>.

**Key words** [cultivation](#) [fertilizing technology](#) [Castor \(\*Ricinus communis\*\)](#) [red soil](#)

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