

[Home](#) [Plant Cell, Tissue and Organ Culture \(PCTOC\)](#) [Article](#)


# Establishment of in vitro root cultures and hairy roots of *Dioscorea composita* for diosgenin production

Original Article Published: 10 April 2025

Volume 161, article number 24, (2025) [Cite this article](#)[Save article](#) [View saved research](#)

Plant Cell, Tissue and Organ  
Culture (PCTOC)

[Aims and scope](#)[Submit manuscript](#)

[Guadalupe Cristina Sánchez-López](#), [David Carranza-Ojeda](#), [Lemuel Pérez-Picaso](#), [Roxana Martínez-Pascual](#), [Omar Viñas-Bravo](#), [Adolfo López-Torres](#), [Eugenio Pérez Molphe-Bach](#), [Eréndira García-Ríos](#), [José Antonio Morales-Serna](#) & [Enrique Villalobos-Amador](#) 

 409 Accesses  1 Citation  4 Altmetric [Explore all metrics](#) →

## Abstract

Diosgenin is the primary precursor for the chemical synthesis of progesterone and cortisone. This secondary metabolite can be obtained from plants of the *Dioscorea* genus. At the industrial level, the propagation of these plants is typically carried out using conventional