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Publish by Abstract

Use of a Simple Method to Isolate Intact RNA From Partially Hydrated *Selaginella Lepidophylla* Plants

JUAN P. VALENZUELA-AVENDAÑO[1], IVÁN A. ESTRADA MOTA[2], GABRIEL LIZAMA UC[2], RAMÓN SOUZA PERERA[2], ELISA M. VALENZUELA-SOTO[1] and JOSÉ J. ZÚÑIGA AGUILAR[2,*]

[1]*Coordinación de Ciencia de los Alimentos, Centro de Investigación en Alimentación y Desarrollo A.C., Hermosillo, Sonora, México;* [2]*Unidad de Bioquímica y Biología Molecular de Plantas, Centro de Investigación Científica de Yucatán, Mérida, Yucatán, México*

Abstract. Isolation of high-quality RNA is a necessary step in gene expression analysis. Although many methods can be used to isolate RNA from plants where contamination of preparations with complex carbohydrates or phenolic compounds is a problem, the application of these methods to *Selaginella lepidophylla* tissues has failed to obtain good-quality RNA. Here we introduce 2 modifications to the method developed by Chomczynski and Sacchi (1987), generating a simple and rapid method that allows the isolation of intact RNA from *S. lepidophylla*–dehydrated tissues. Although the introduced modifications are not new, their addition proved to be decisive for success in RNA isolation. Quality of the RNA obtained was evaluated by electrophoresis in agarose and by 3 different PCR-based techniques—RT-PCR, RNA differential display, and synthesis of a cDNA library.

Full text[†]**:** This article, in detail, is available only in the electronic version of the *Plant Molecular Biology Reporter.*

Contents: This article contains Introduction, Materials and Methods, Results and Discussion, 14 references, and 1 illustration.

Illustrations:

Figure 1. Denaturing 6% polyacrylamide gel electrophoresis of products synthesized using the Delta Differential Display kit (Clontech).

[*]Author for correspondence. Present address: Unidad de Bioquímica y Biología Molecular de Plantas, Centro de Investigación Científica de Yucatán, calle 43 No. 130, colonia Chuburná de Hidalgo, Mérida 97200, Yucatán, México; e-mail: zuñiga@cicy.mx; fax: 999-981-3900; ph: 999-981-3921.

[†]Editor's note: Although the scientific content of this article has been reviewed, the full-text Web publication has not been edited in detail.

Key words: resurrection plants, reverse transcription–polymerase chain reaction, RNA extraction