

# **Adaptation of Quinoa in Mexico. (C08-villareal085038-Poster)**

## **Authors:**

- O.T.Banuelos - *CIMMYT*
- R.L.Villareal - *CIMMYT*
- J.Meja - *Univ.de Chapingo*

## **Abstract:**

Quinoa (*Chenopodium quinoa* Willd.) is a crop native to South America (Peru, Ecuador and Bolivia), where it has been cultivated for more than 7,000 years. It is known the world over for its high grain protein content and balanced concentration of essential amino acids. Quinoa grain is used to make bread, soup, salads, desserts, food color and fabric dyes. In the highland of Mexico, people eat the grain and the leaves as a vegetable because of its unique taste (better than spinach), palatability, high digestibility. Quinoa also possesses an eating quality superior to that of some of its *Chenopodium* relatives. The main objective of this research was to study the adaptation of quinoa in some regions of Mexico. Field trials of a multiline composed of six Peruvian quinoa ecotypes were conducted from 1994 to 2001. Data on dry matter production, plant height and crude protein content were taken. Results showed that the maximum average temperatures that allow good crop development were close to 25 °C. Quinoa's ability to grow in locations with contrasting environmental conditions demonstrated its plasticity and high adaptation. Lastly, quinoa's high protein content and dry matter production are novel traits that could be exploited for human consumption, forage and as green manure to improve soil fertility.

## **Corresponding Author Information:**

Reynaldo Villareal	phone: 52-55-5804-2004
CIMMYT	fax: 52-55-5804-7558/59
CIMMYT, Apdo. Postal 6-641	e-mail: r.villareal@cgiar.org
Mexico, D.F., MX 06600	
Mexico	

## **Presentation Information:**

Presentation Date: Monday, November 11, 2002

Presentation Time: 4:00-6:00 pm

Poster Board Number: 1301

**Keywords:**

Quinoa, Adaptation, Production, Yield