

International Quinoa Conference 2016:

Quinoa for Future Food and Nutrition Security in Marginal Environments

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PROSPECTS OF BOLIVIAN ROYAL QUINOA: TOWARDS THE GLOBAL EXPANSION OF THE ANDEAN CROP

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Background

The inflection point for QUINOA: The International Year 2013



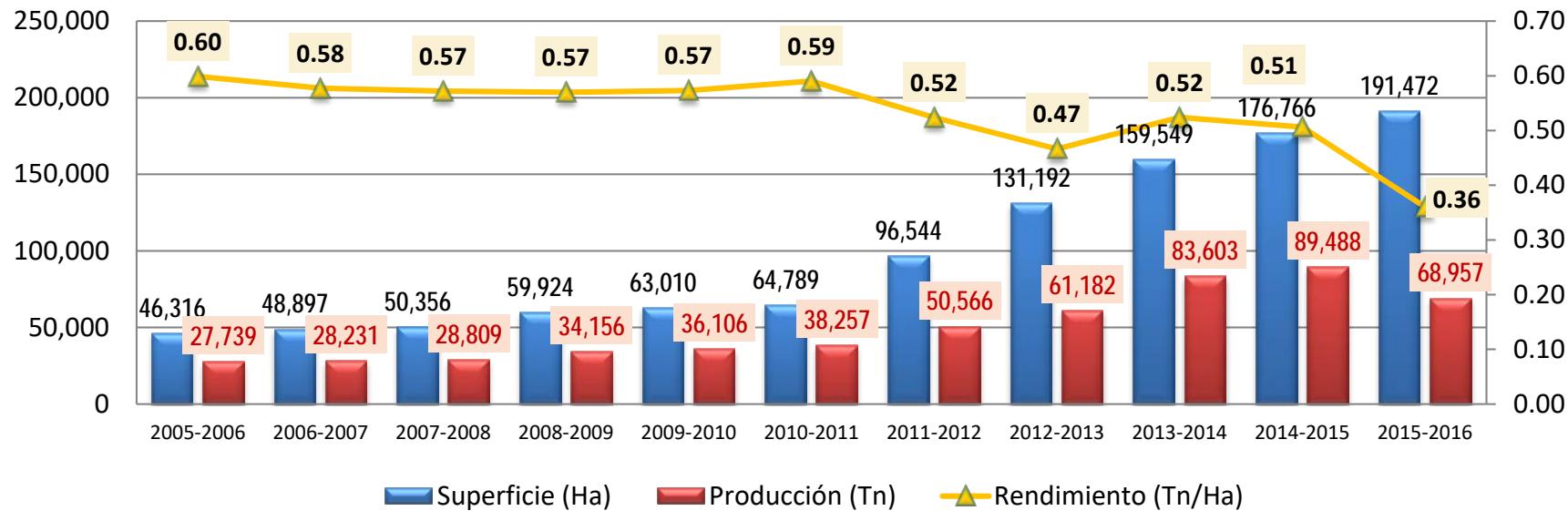
The inflection point for QUINOA: The International Year 2013



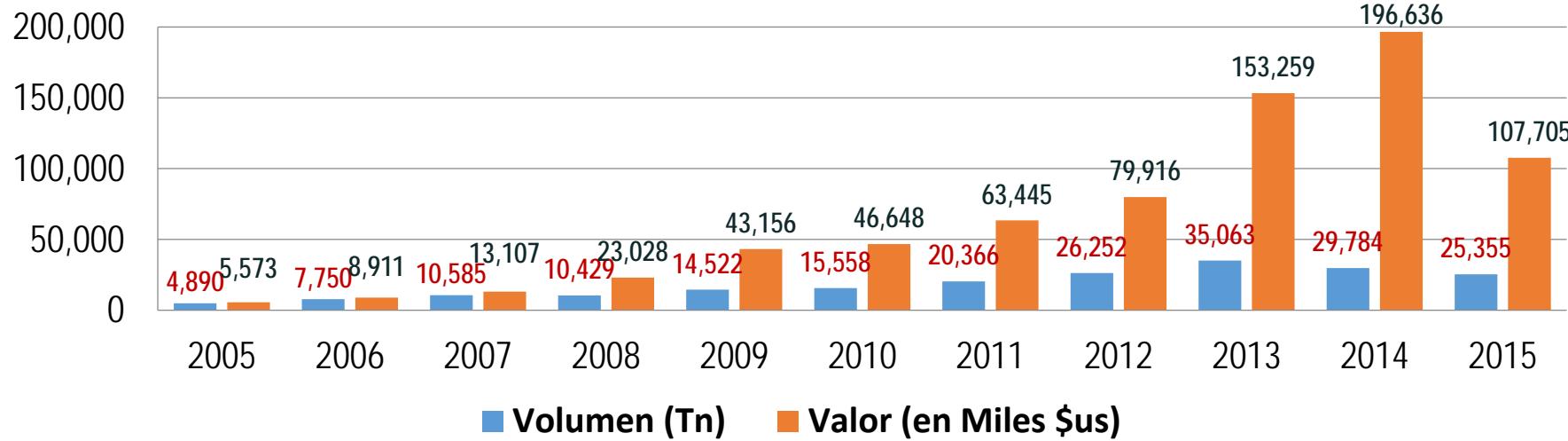
Source: FAO webpage

BOLIVIA: Evolution of Area, Production and Yield

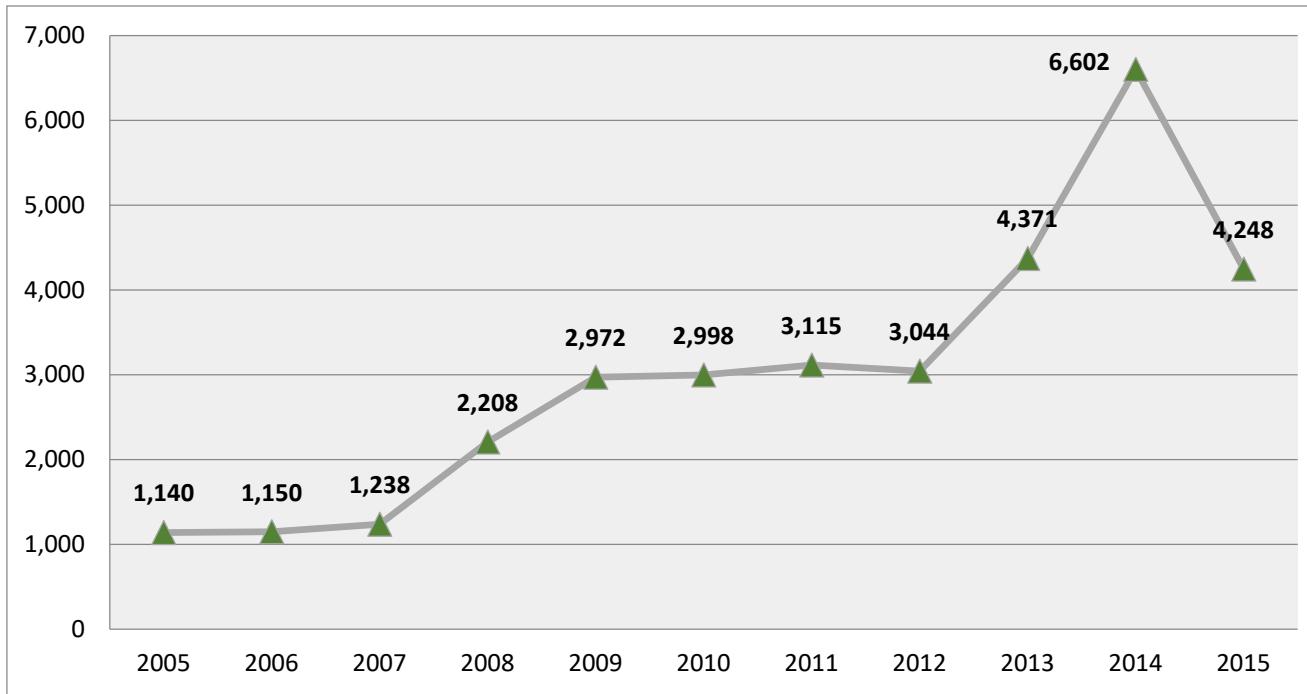
(Agricultural period 2005/2006 – 2015/2016)



BOLIVIA: Evolution of Value and Exports (Thousands USD)

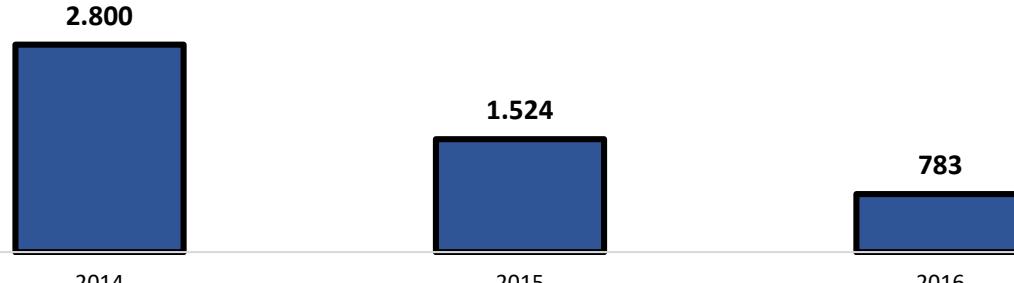


BOLIVIA: Quinoa Export Prices (USD/Ton)



Source: INE - MDRyT – OAP. 2016

BOLIVIA: Average price of Quinoa on Producers (In USD/Ton)



Source: INE - MDRyT – OAP. 2016

¿And...How about the future of our Golden Grain? Mainly the Royal Quinoa?



Royal Quinoa Biodiversity

(Royal Quinoa Catalogue; PROINPA FOUNDATION, 2012)

ACHACHINO



CAFÉ CHULLPA



CARIQUIMEÑA



CH'ULLPI ROJO



HILO

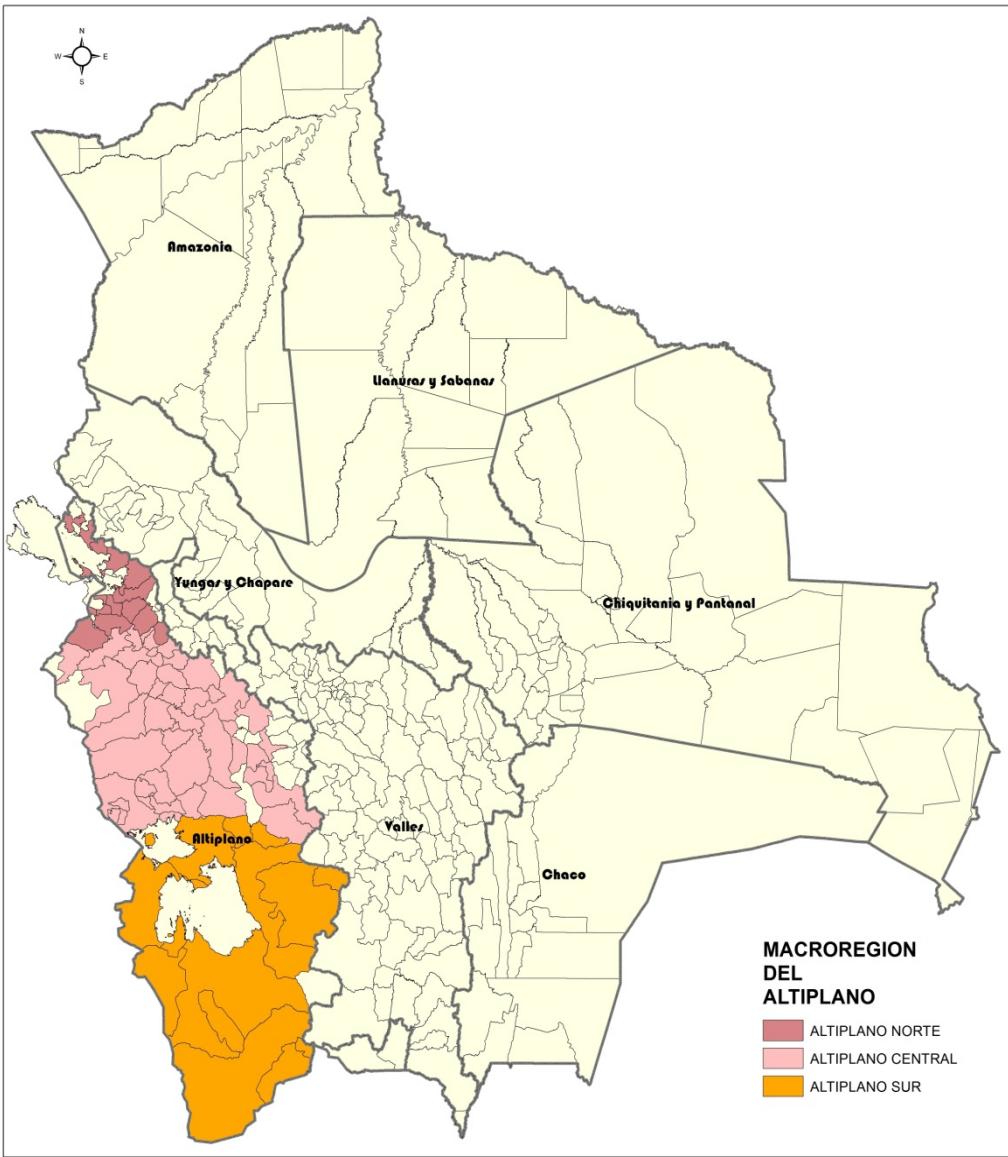


MANZANO



52 ECOTIPES

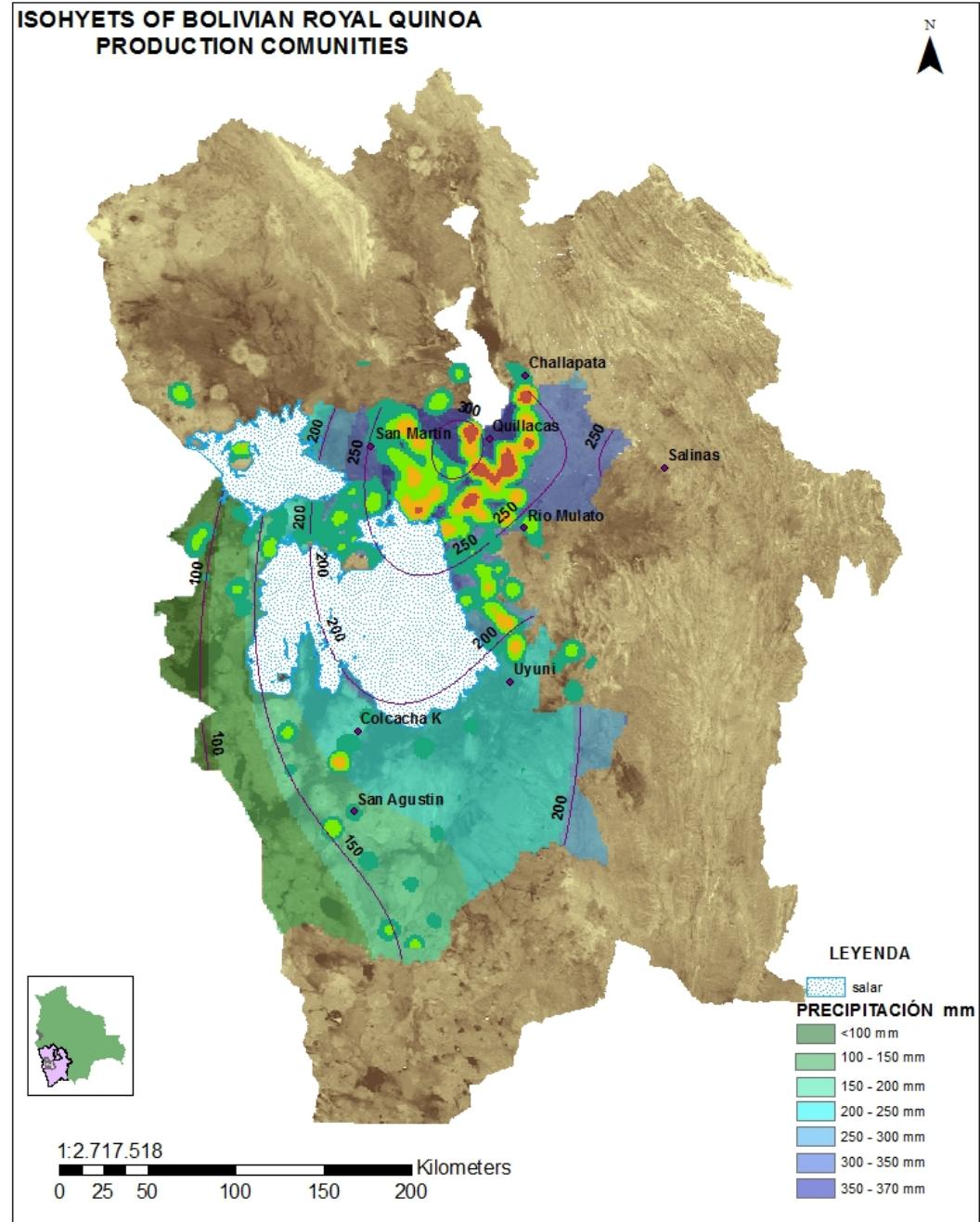
Are grown in the Southern Bolivian Altiplano



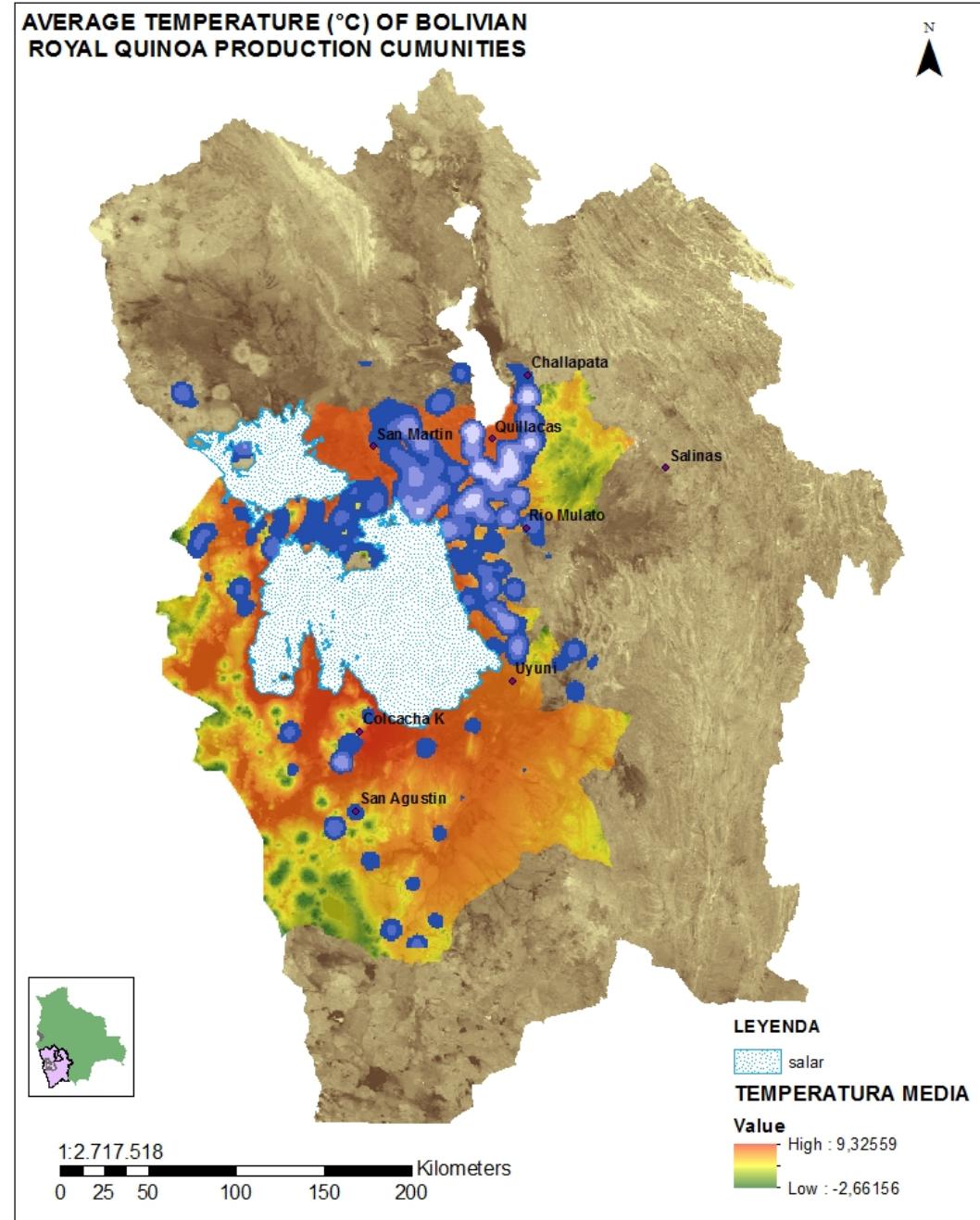
3.600 to 4.200 m asl



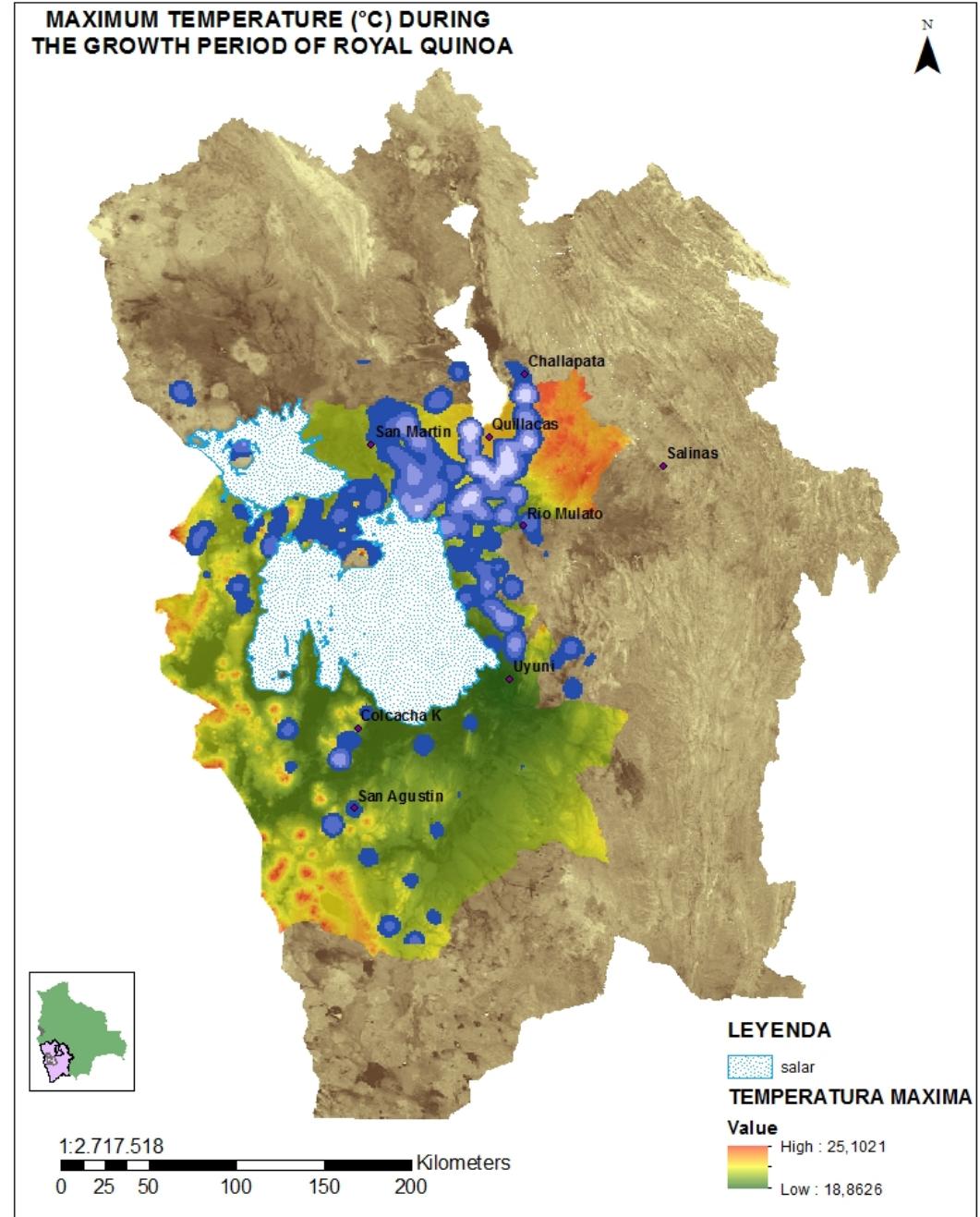
Climatic Conditions



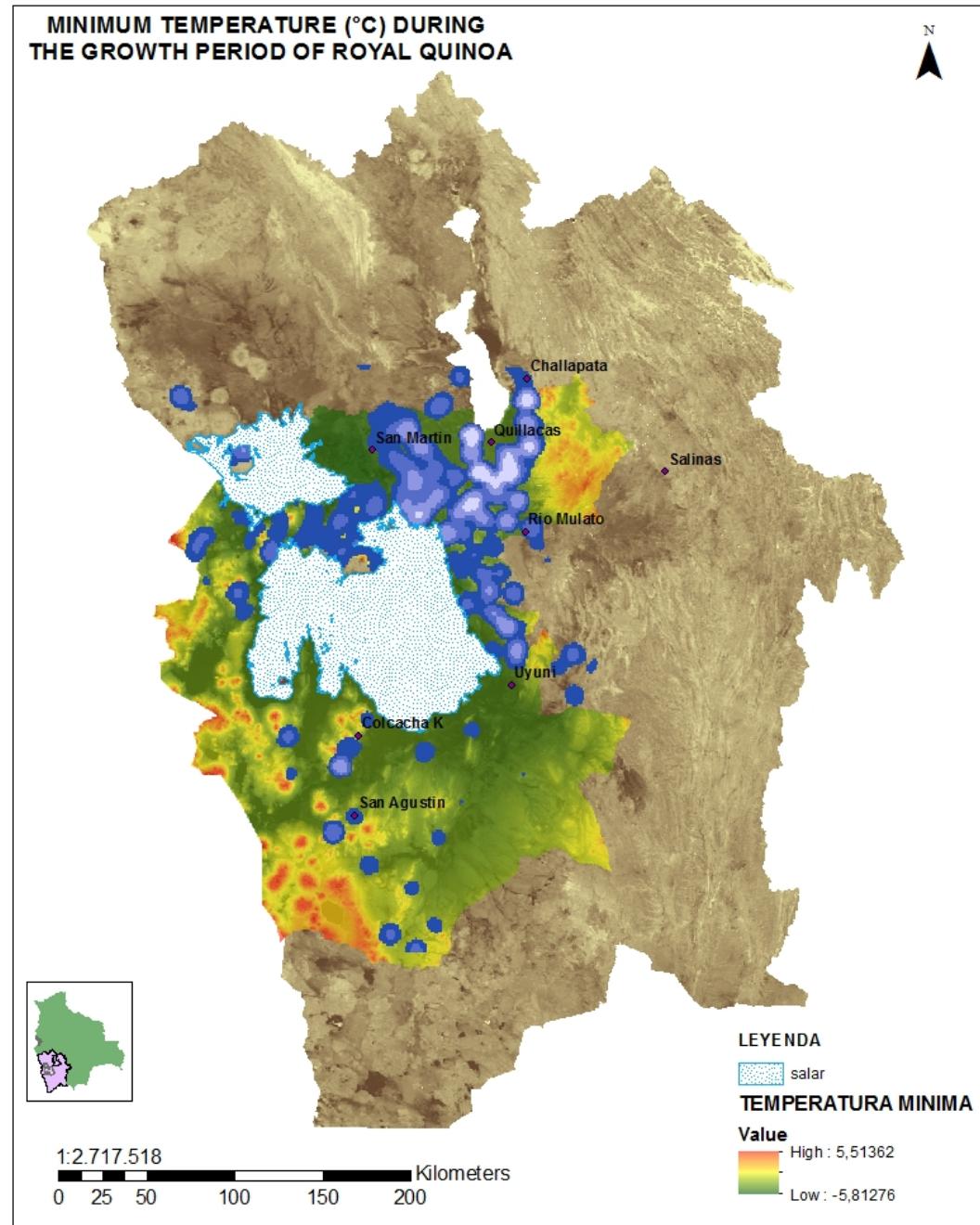
Climatic Conditions



Climatic Conditions



Climatic Conditions



Soil Conditions



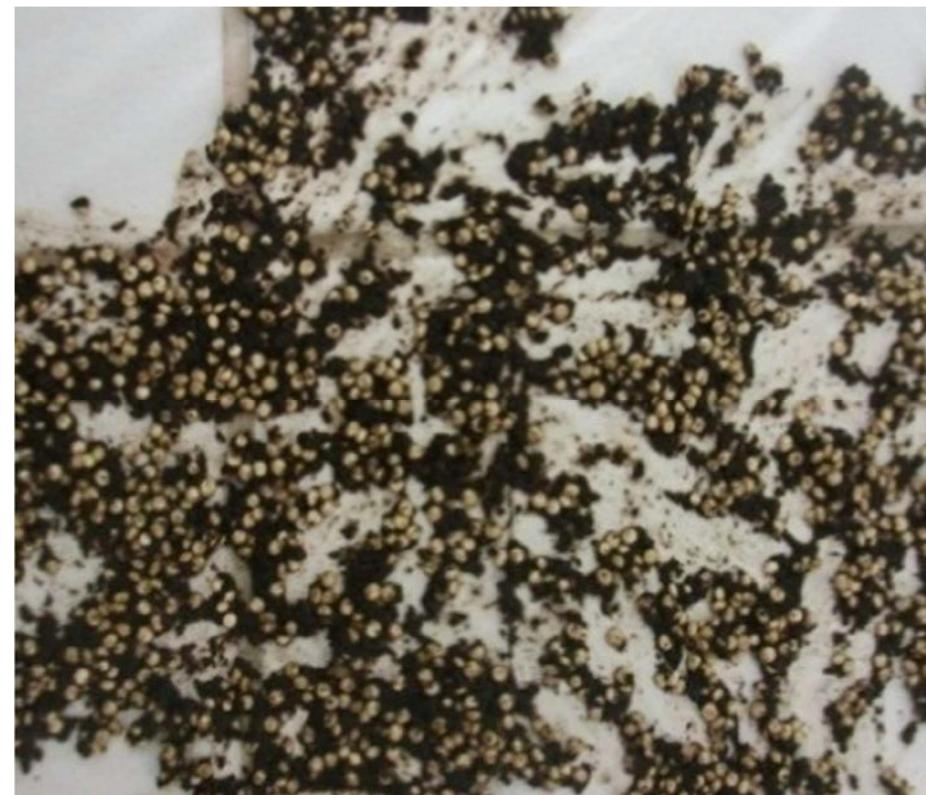
Sandy soils (volcanic)
Very low soil fertility

Low organic matter content (< 2.8%)

A miracle in a desert

There are some studies discovering free living bacteria in quinoa cropping soils

Isolated 6 strains of ***Bacillus*** and
Paenibacillus
(Source: Morales et al., 2013)



Innuculated Quinoa seeds Strain of Bacteria

Quinoa grown with animal manure 30 ton/ha



Last years problem; displacement of camelids to non traditional areas



BOLIVIAN GOBERNMENT STRATEGY

Organic Certification

Origin denomination