



“Research and industry working together” Spanish processing tomato challenge

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CENTRO DE INVESTIGACIONES
CIENTÍFICAS Y TECNOLÓGICAS
DE EXTREMADURA



Spain (2017)

REGIÓN	Millons kg	Industries	% Production
Extremadura	2.125	14	68,91
Andalucía	940	3	30,48
Rest of Spain	19	4	0,61
Total	3.084	21	100,00





Production Challenges

Problems



Target production:
120T/ha

High quality



Solutions



Climate change



Varieties adapt to climatic adversities?

Increase and new pests and diseases

(Low Brix, colour and high pH) interannual differences

irregular ripening

Water scarcity, incorrect water needs estimation

Fertilization Pollution, incorrect fertilization apply

Management

Precision agriculture



SPATIAL VARIABILITY
homogeneity yield and control soil heterogeneity

Precision transplanting and harvest

Efficient management /reduce environmental impact

Water and fertilization
efficient management



Precision irrigation and fertilization
Soil and plant water status friendly sensors
Irrigation strategies, Automatic irrigation, DSS

High quality production



Agronomical strategies and varieties to improve quality
(brix, Lycopene, colour...)





Industries Challenges



OBSERVATORIO TECNOLÓGICO DEL TOMATE PARA INDUSTRIA

Technological surveillance system

