CURRICULUM

PERSONAL INFORMATION

Name	: César Antonio Acevedo-Opazo
Birth Date	: November 11, 1972 (Talca, Chile)
Number of passport	: 10.858.524-2
Address	: Casilla 747, Talca-Chile
Phone	: (56) – 071 – 200426 / 200377
Fax	: (56) – 071 – 201695
E-mail	: cacevedo@utalca.cl

EDUCATION

Dr., Science Agronomic, Montpellier Sup Agro, (Montpellier, Francia) - 2009.

- Major Field: Precision Viticulture
- Minor Fields: Vine water status (Génie des procédés)

M.S., Food Industry and Environment, Montpellier-SupAgro, (Montpellier, Francia) - 2007.

- Major Fields: Agronomic Engineer;
- Minor Fields: Agro T.I.C. (Génie Rural)

B.S., Agronomy School**,** Universidad de Talca, Talca-1998.

- Major Fields: Vine production and Irrigation.

PROFESSIONAL EXPERIENCE

Co-Director: Research and Extension Centre for Irrigation and Agroclimatology (CITRA), Universidad de Talca - 2007 to Present.

Assistant professor (current rank)**:** Agronomy School (60% Research; 40% Academic Program) Universidad de Talca, Chile - 2008 to Present.

Director: Department of Agricultural Production, Universidad de Talca - 2011 to Present.

RESEARCH AND TEACHING

Academic Program:

- **Undergraduate courses**: a) Edaphology; b) Viticulture II; c) Integrative Module I.
- **Graduate courses**: a) Precision Agriculture; b) Technologies in fruit and wine production; c) Doctoral seminar II.

Research Program:

a) Spatial variability; b) Regulated deficit irrigation; c) Plant water relations; d) Plant water status; e) Irrigation management.

PUBLICATIONS

Refereed Journals (2007-2013)

1. **Acevedo-Opazo, C**., Valdés-Gómez, H., Taylor, J.A., Avalo, A., Verdugo, N., Araya, M., Jara F. and Tisseyre B. (2013) Assessment of an empirical spatial prediction model of vine water status for irrigation management in a grapevine field. Agricultural Water Management, (In Press). (ISI). (Impact factor: 2.51).

2. Taylor, J.A., **Acevedo-Opazo, C**., Pellegrino, A., Ojeda, H. and Tisseyre, B. (2012) Can Within-season grapevine predawn leaf water potentials be predicted from meteorological data in non-irrigated Mediterranean vineyards?. Journal International des Sciences de la Vigne et du Vin, 46, n°3, 221-232. (ISI). (Impact factor: 1.02).

3. Taylor, J.A., **Acevedo-Opazo, C**., Ojeda, H. and Tisseyre, B. (2011) A comment on inter-field spatial extrapolation of vine (Vitis vinifera L.) water status. Journal International des Sciences de la Vigne et du Vin, 45, n°2, 121-124. (ISI). (Impact factor: 1.02).

4. **Acevedo-Opazo, C**., Tisseyre, B., Taylor, J.A., Ojeda, H. and Guillaume, S. (2010) Spatial prediction model of the vine (Vitis vinifera L.) water status using high resolution ancillary information. Journal of Precision Agriculture, 11, 358–378. (ISI). (Impact factor: 1.55).

5. **Acevedo-Opazo, C.**, Ortega-Farias, S. and Fuentes S. (2010) Effects of grapevine (Vitis vinifera L.) water status on water consumption, vegetative growth and grape quality: An irrigation scheduling application to achieve regulated deficit irrigation. Agricultural Water Management, 97, 956-964. (ISI). (Impact factor: 2.51).

6. **Acevedo-Opazo, C**., Tisseyre, B., Ojeda, H. and Guillaume, S. (2010) Spatial extrapolation of the vine (Vitis vinifera L.) water status: a first step towards a spatial prediction model. Irrigation Science, 28,143-155. (ISI). (Impact factor: 1.64).

7. Taylor, J.A., **Acevedo-Opazo C**., Ojeda, H. and Tisseyre, B. (2010) Identification and significance of sources of spatial variation in grapevine water status. Australian Journal of Grape and Wine Research, 16, 218-226.(ISI). (Impact factor: 2.46).

8. **Acevedo-Opazo, C**., Tisseyre, B., Guillaume, S., Ortega-Farías, S. and Ojeda, H. (2008) Is it possible to assess the spatial variability of vine water status?. Journal International des Science de la Vigne et du Vin, 42,n°4,203-219. (ISI). (Impact factor: 1.02).

9. **Acevedo-Opazo, C**., Tisseyre, B., Guillaume, S. and Ojeda, H. (2008) The potential of high spatial resolution information to define within-vineyard zones related to vine water status. Journal of Precision Agriculture, 9, 285-302. (ISI). (Impact factor: 1.55).

10. S. Ortega-Farías, M. Carrasco, A. Olioso, **C. Acevedo** and C. Poblete. (2007) Latent heat flux over Cabernet Sauvignon vineyard using the Shuttlerworth and Wallace model. Irrigation Science, 25, 161-170. (ISI). (Impact factor: 1.64).

Refereed Proceedings (2007-2012)

11. **Acevedo-Opazo, C.**, López-Olivari, R., Jara-Rojas, F., Valdés- Gómez H., Figueri, Q. and J.A. Taylor (2012). Model for spatial extrapolation of stomatal conductance on a young drip-irrigated olive orchard cv. Arbequina under semi-arid condition. Acta Hort. (ISHS), (In press).

12. Valdés- Gómez H., Guajardo, A., Jara-Rojas, F., Taylor, J.A. and **Acevedo-Opazo, C**., (2012) Study of spatial variability of stomatal conductance within plant on a young drip-irrigated olive orchard cv. Arbequina under semi-arid condition. Acta Hort. (ISHS), (In press).

13. **Acevedo-Opazo, C.**, Jara, F., Valdés-Gómez, H., Ortega-Farías, S., Taylor, J.A. and Tisseyre B. (2011). Towards the spatial prediction model of vine water status using ancillary information. 6th International Symposium on Irrigation of Horticultural Crops. Acta Hort. (ISHS), 2011. 889:151-158.

14. Valdés-Gómez, H., Brisson, N., **Acevedo-Opazo, C**., Gary, C. and Ortega-Farías, S. (2011). Modelling the effects of Niño and Niña events on water balance of grapevine (cv. Cabernet Sauvignon) in Central valley of Chile. Sixth International Symposium on Irrigation of Horticultural Crops. Acta Hort. (ISHS), 2011. 889:159-166.

15. Taylor, J.A., **Acevedo-Opazo, C**., Guillaume, S., Ojeda, H. and Tisseyre, B. (2010). A further comment on inter-field spatial extrapolation of vine (Vitis vinifera L.) water status. Precision agriculture '10: Proceedings of the 10th European Conference on Precision Agriculture (ECPA) (pp. 172-181).

16. Valdés-Gómez, H., **Acevedo-Opazo, C**., Araya-Alman, M., Verdugo-Vásquez, N., Avalo-Henríquez, A., Cartolaro, P., Lolas-Caneo, M. and Gary, C. (2010). Evaluation of a decision rule for the integrated control of powdery mildew in vineyards in Chile. In Proceedings of the XIth European Society of Agronomy Congress (ESA). (pp. 182-184).

17. Taylor, JA, Tisseyre, B, **Acevedo-Opazo, C**. and Lagacherie, P. (2009). Field-scale model of the spatio-temporal vine water status in a viticulture system. In E. J. van Henter, D. Goense and C. Lokhorst (Eds.), Precision agriculture '09: Proceedings of the 7th European Conference on Precision Agriculture (ECPA). (pp. 537-544). Wageningen, The Netherlands: Wageningen Academic Publishers.

18. **Acevedo-Opazo, C**., Jara, F., Poblete, C., Valdés- Gómez, H., Ortega-Farias, S., Fuentes, S. and Tisseyre, B. (2009). Preliminary model for spatial extrapolation of the vine stomatal conductance. In Proceedings of the 8th Fruit, Nut and vegetable production engineering symposium (FRUTIC). (pp. 49-57). Concepción, Chile, 5-9 January 2009.

19. Poblete, C., **Acevedo-Opazo, C**., Ortega-Farías, S., Valdés-Gómez, H. and Nuñez, R. (2009). Study of NDVI spatial variability over a Merlot vineyard-plot in Maule Region using a hand held Spectroradiometer. In Proceedings of the 8th Fruit, Nut and vegetable production engineering symposium (FRUTIC). (pp. 182-188). Concepción, Chile, 5-9 January 2009.

20. Fuentes, S., Collins, M., Rogers, G., **Acevedo, C**., Conroy, J. (2009) Nocturnal heat-pulse sap flow as a sensitive system to assess drought effects on grapevines: an irrigation scheduling application?. Acta Hort. (ISHS) 846:167-176.

21. Rousseau, J., Dupin, S., **Acevedo-Opazo, C**., Tisseyre, B. and Ojeda, H. (2008) L'imagerie aerienne: Application à la caractérisation des potentiels viticoles et œnologiques. In : Proceeding of 31éme Congrès mondial de la vigne et du vin. Bulletin de l'OIV, 2008, Vol. 81:507-517.

22. Ortega-Farias, S., Carrasco, M., Poblete, C., **Acevedo, C**. and Olioso, A. (2008) Evaluation of the Shuttleworth and Wallace model to estimate Latent Heat Flux over a vineyard. Acta Hort. (ISHS) 792: 503-510.

23. Celette, F., Valdés, H., Gary, C., García de Cortázar, I., Ortega-Farias, S. and **Acevedo, C**. (2008) Evaluation of the STICS model for simulating vineyard water balance under two different water management strategies. Acta Hort. (ISHS) 792:155-162.

24. **Acevedo-Opazo, C**., Tisseyre, B., Guillaume, S. and Ojeda, H. (2007) Modelling the spatial variability of the vine water status within field scale. In: Proceeding of XVth Conference of Groupe d'Etude des Systèmes de Conduite de la Vigne (GESCO). (pp. 1382-1391). Poreč, Croacie, 20-23 June 2007.

25. **Acevedo-Opazo, C**., Tisseyre, B., Guillaume, S. and Ojeda, H. (2007) Test of the use of NDVI information to propose a relevant vineyard zoning related to vine water status. In J. V. Stafford (Ed.), Precision agriculture '07: Proceedings of the 6th European Conference on Precision Agriculture (ECPA). (pp. 547-554). Wageningen, The Netherlands: Wageningen Academic Publishers.

LIST OF PROJECT AS RESEARCHER (2007-2013)

1. Improvement of precision agriculture at the University of Talca. Research program (CONICYT-MEC) of Chilean Science Foundation. Principal Investigator, 2013-2014 (budget: USD 20,000).

2. Scientific Equipment Acquisition for Sustainable Water Management in the Maule region. Fund for fostering scientific and Technological research (FONDEQUIP), Investigator, 2013-2014 (budget: USD 300,000).

3. Evaluation and development of integrated control strategies of powdery mildew in four grapevine cultivars in central region of Chile. Research program (FONDECYT) of Chilean Science Foundation. Co-Investigator, 2013-2016 (budget: USD 220,000).

4. Spatial extrapolation model of plant water status under irrigated conditions using punctual measurements of vine water potential and site-specific ancillary information. Research program (FONDECYT) of Chilean Science Foundation. Principal Investigator, 2011-2014 (budget: USD 120,000).

5. Screening of genetic material and development of clones and management techniques on maqui (*Aristotelia chilensis*) to improve the supply of exportable commodity and agribusiness. Fund for fostering scientific and Technological research (FONDEF), Chilean Science Foundation. Investigator, 2011-2014 (budget: USD 600,000).

6. Improving undergraduate Chilean Agricultural Engineers through exchange stays in institutions of education in France. Research program (FIAC 2) of Chilean Science Foundation. Co-Director, 2012-2014 (budget: USD 300,000).

7. Research program on adaptation of agriculture to climate change. Research program of University of Talca. Investigator, 2013-2017. (budget: USD 500,000).

8. Application of remote sensing technologies to optimize irrigation water and energy for drip-irrigated fruit orchards and vineyards using a Geo-informatics system. Fund for fostering scientific and Technological research (FONDEF), Chilean Science Foundation. Co-Director, 2011-2014. (budget: USD 1.3 million).

9. Implementation of a water management system of fruit production for the Irrigation Association of South Maule River. Chilean Economic Development Agency (INNOVA-CORFO). Co-Director, 2010-2013. (budget: USD 800,000).

10. Perspective of precision agriculture in Chile: State of the art, application and perspective. Chilean Office of Agricultural Planning (ODEPA). Investigator, 2008-2009. (budget: USD 20,000).

11. Extension program in irrigation water management, VI and VII Regions. National Commission for Irrigation (CNR). Investigator, 2008-2010. (budget: USD 90,000).

12. Improving grapevine quality and yield base on irrigation strategies and physiological indexes. Chilean Economic Development Agency (INNOVA-CORFO). Investigator, 2007-2009. (budget: USD 240,000).

13. Optimization of water use to improve quality and yield of a drip-irrigated olive orchard (Olea Europea L.). Chilean Economic Development Agency (INNOVA-CORFO). Investigator, 2007-2010. (budget: USD 400,000).