



# Carlos Cantero

## Catedràtic d'Universitat

### Datos personales



**Categoría:** Catedràtic d'Universitat

**Àrea de conocimiento:** Agronomia

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### Formación Académica

- Enginyer agrònom, Universitat Politècnica de Catalunya (UPC), 1984
- Doctorat en Agronomia, UPC, 1989

### Experiencia Profesional

- 1983 - 1998. Titular d'Escola Universitària. Universitat de Lleida (UdL)
- 1998 - 2009. Titular de Universitat, UdL
- 2009 - actualitat. Catedràtic de Universitat, UdL

### Investigación

- Agronomía sostenible per a zones mediterrànies: Optimització de la fertilització nitrogenada en cultius herbacis extensius.
- Agronomia del conreu de conservació.



- **C u l t i u s** **a l t e r n a t i u s .**
- Aplicació integrada de tècniques agronòmiques per a l'optimització de la productivitat agrícola en sistemes **a g r í c o l e s** **m e d i t e r r à n i s .**
- Manteniment i Desenvolupament de la Biodiversitat.

## Docencia

- PRÀCTIQUES INTEGRADES:ENGINYERIA I GESTIÓ **Grau en Enginyeria Agrària i Alimentària**
- DE LA PRODUCCIÓ AGROPECUARIA **Grau en Enginyeria Agrària i Alimentària**
- PRÀCTIQUES INTEGRADES:ENGINYERIA I GESTIÓ **Grau en Enginyeria Agrària i Alimentària**
- TECNOLOGIA DE CULTIUS HERBACIS **Grau en Enginyeria Agrària i Alimentària**
- PROGRAMES DE PROTECCIÓ INTEGRADA DE CULTIUS **Màster Universitari en Protecció Integrada de Cultiu**
- AGRONOMIA:SISTEMES AGRÍCOLES **Màster Universitari en Protecció Integrada de Cultiu**

## Publicaciones Recientes

Álvaro-Fuentes J, Arrúe JL, Carlos-Martínez C, Isla R, Plaza-Bonilla, Quilez D. 2016. Fertilization scenarios in sprinkler irrigated corn under Mediterranean conditions: effects on greenhouse gas emissions. *Soil Science Society of America Journal* 80: 662–671 DOI:10.2136/sssaj2015.04.0156

Lampurlanés, J.; Plaza-Bonilla, D.; Álvaro-Fuentes, J.; Cantero-Martínez, C. 2016. Long-term analysis of soil water conservation and crop yield under different tillage systems in Mediterranean rainfed conditions. *Field Crops Research*, 189: 59-67 DOI: 10.1016/j.fcr.2016.02.010.

Recasens J., Garcia Al., Cantero-Martinez C., Torra J., Royo-Esnal A. 2016. Long-term effect of different tillage systems on the emergence and demography of *Bromus diandrus* in rainfed cereal fields. *Weed research*, 56:31-40. DOI: 10.1111/wre.12185.

Plaza-Bonilla D., Arrue JI., Cantero-Martinez C., Fanlo R., Iglesias A., Alvaro-Fuentes C. 2015. Carbon management in dryland agricultural systems. A review. *Agronomy for Sustainable Development*, 35:1319-1334. DOI: 10.1007/s13593-015-0326-x

Castañeda-Vera A., Leffelaar Pa., Alvaro-Fuentes J., Cantero-Martinez C., Minguez I. 2015. Selecting crop models for decision making in wheat insurance. *European Journal for Agronomy*, 68: 97-116. DOI:10.1016/j.eja.2015.04.008.

Cardador L., De Caceres M., Giralt D., Bota G., Aquilué N., Arroyo B., Mougeot F., Cantero-Martinez C., Viladomiu L, Rosell J., Casas F., Estrada A., Alvaro-Fuentes J., Brotons L. 2015. Tools for exploring habitat suitability for steppe birds under land use change scenarios. *Agriculture, Ecosystems and Environment*, 200:119-125.DOI:10.1016/j.agee.2014.11.013.

Garcia Al., Royo-Esnal A., Torra J., Cantero-Martinez C., Recasens J. 2014. Integrated management of *Bromus Diandrus* in dryland cereal fields under no-til. *Weed Research*: 54- 408-417. DOI:10.1111/wre.12088



Plaza-Bonilla D., Cantero-Martinez C., Bareche J., Arrue JI. Álvaro-Fuentes J. 2014. Soil C fluxes, biomass-C inputs and soil carbon stocks as affected by tillage and N fertilization in dryland conditions. *Plant and Soil*. 381-111-130. DOI 10.1007/s11104-014-2115-8

Cardador L., Caceres M., Bpta G., Giralt D., Casas F., Arroyo B., Mougeot F., Cantero-Martinez C., Moncunill J. Butlers S., Brotons L. 2014. A Resource-Based Modelling Framework to Assess Habitat Suitability for Steppe Birds in Semiarid Mediterranean Agricultural Systems. *PLoS ONE* 9(3): e92790. doi:10.1371/journal.pone.0092790

Plaza-Bonilla D., Álvaro-Fuentes J., Arrue JI., Cantero-Martinez C. 2014. Tillage and nitrogen fertilization effects on nitrous oxide yield-scaled emissions in a rainfed Mediterranean area. *Agriculture, Ecosystems and Environment*, 189:43-52.

Plaza-Bonilla D., Álvaro-Fuentes J., Cantero-Martinez C. 2014. Identifying soil organic carbon fractions sensitive to agricultural management practices. *Soil and Tillage Research* 139:19-22. <http://dx.doi.org/10.1016/j.still.2014.01.006> [ <http://dx.doi.org/10.1016/j.still.2014.01.006> ].

Plaza Bonilla D., Álvaro-Fuentes J., Hansen Nc., Lampurlanes J., Cantero-Martinez C. 2014. Winter cereal root growth and aboveground-belowground biomass ratios as affected by site and tillage system in dryland Mediterranean conditions. *Plant and Soil*, 374: 925-939. DOI10.1007/s11104-013-1926-3.

Plaza-Bonilla D., Cantero-Martinez C., Alvaro-Fuentes J. 2014. Soil management effects on soil greenhouse gases production at the macroaggregate scale. *Soil Biology & Biochemistry*. 68-471-481. <http://dx.doi.org/10.1016/j.soilbio.2013.10.026> [ <http://dx.doi.org/10.1016/j.soilbio.2013.10.026> ]

Alvaro-Fuentes J., Plaza-Bonilla D., Arrue JI., Lampurlanes J., Cantero-Martinez C., 2014. Soil organic carbon storage in a no-tillage chronosequence under Mediterranean conditions. *Plant and Soil*, 376:31-4. DOI 10.1007/s11104-012-1167-x.

Albajes R., Cantero-Martinez C., Capel T., Christou P., Galceran J., Lopez-Gatius F., Marin S., Martin-Belloso O., Motilva Mj., Nogareda C., Peman J., Puy J., Recasens J., Romagosa I., Romero Mp., Vanchis V., Savin R., Slafer G., Soliva-Fortuny R., Viñas I., Voltas J. 2013. Building bridges: an integrated strategy for sustainable food production throughout the value chain. *Molecular Breeding*, 32-743-770. DOI 10.1007/s11032-013-9915-z.

Álvaro-Fuentes J., Morell F.J., Madejon E., Lampurlanes J., Arrue JI., Cantero-Martinez C. 2013. Soil biochemical properties in a semiarid Mediterranean agroecosystem as affected by long-term tillage and N fertilization *Soil and Tillage Res.*, 129: 69-74.

Plaza-Bonilla D., Cantero-Martinez C., Álvaro-Fuentes J. 2013. Soil aggregate stability as affected by fertilization type under semiarid no-tillage conditions. *Soil Science Society of America Journal*. 77:284-292.

Plaza-Bonilla D., Cantero-Martinez C., Viñas P., Álvaro-Fuentes J. 2013. Soil aggregation and organic carbon protection in a no-tillage chronosequence under Mediterranean conditions. *Geoderma*, 193-194: 76-82. DOI:10.1016/j.geoderma.2012.10.022 [ <http://dx.doi.org/10.1016/j.geoderma.2012.10.022> ].

Alvaro-Fuentes J., Morell Fj., Plaza-Bonilla D., Arrue JI., Cantero-Martinez C., 2012. Modelling tillage and nitrogen fertilization effects on soil organic carbon dynamics. *Soil and Tillage Res.*, 120: 32-39.

Morell Fj., Whitmore Ap., Álvaro-Fuentes J., Lampurlanes J., Cantero-Martinez C. 2012. Root respiration of barley in a semiarid Mediterranean agroecosystem: field and modelling approaches. *Plant and Soil*, 351:135-143.



Morell Fj., Lampurlanes J., Àlvaro-Fuentes J., Cantero-Martínez C. 2011 Yield and water use efficiency of barley in a semiarid Mediterranean agroecosystem: Long-term effects of tillage and N fertilization. *Soil and Tillage Res.*, 117: 76-84.

Àlvaro-Fuentes J., Easter M., Cantero-Martínez C., Paustian K. 2011. Modelling soil organic carbon stocks and their changes in the northeast of Spain. *European Journal of Soil Science*, 62:685-695.

Cantero-Martínez C., Moncunil J. 2011. Anàlisi agronòmica i ambiental dels cultius cerealístics de secà de la plana de Lleida. Ed. Universitat de Lleida. Lleida. pp. 73. ISBN. 978-84-695-0985-2.

Morell F.J., Cantero-Martínez C., Alvaro-Fuentes J., Lampurlanes J. 2011. Root growth of barley as affected by tillage systems and N fertilization in a semiarid Mediterranean agroecosystem. *Agronomy Journal* 103:1270-1275.

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Àlvaro-Fuentes J., Lampurlanes, J., Cantero-Martínez, C. 2009. Alternative crop rotations under Mediterranean no-tillage conditions: Biomass, grain yield and water-use efficiency. *Agronomy Journal* 101:1227-1234.

Àlvaro-Fuentes, J.; Cantero-Martínez, C.; López, M.V.; Paustian, K.; Deneff, K.; Stewart, C.E.; Arrue, J.L. 2009. Soil Aggregation and Soil Organic Carbon stabilization: Effects of Management in Semiarid Mediterranean Agroecosystems. *Soil Science Society of America Journal* 73:1519-1529.

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