Carlos Cantero-Martínez

Catedrático de Universidad

Datos personales

Categoría: Catedrático de Universidad

Área de conocimiento: Agronomía

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Formación Académica

· Ingeniero agrónomo, Universitat Politécnica de Catalunya (UPC), 1984
· Doctorado en Agronomía, UPC, 1989

Experiencia Profesional

· 1983 - 1998. Titular de Escuela Universitaria. Universitat de Lleida (UdL)
· 1998 - 2009. Titular de Universidad, UdL
· 2009 - actualidad. Catedrático de Universidad, UdL

Investigación

· Agronomía sostenible para zonas mediterráneas.
· Aplicación integrada de técnicas agronómicas para la optimización de la productividad agrícola en sistemas agrícolas mediterráneos.
· Agricultura de conservación
· Diversificación de cultivos. Rotación de cultivos y cultivos alternativos.
· Dinámicas del C y del N y en la producción de cultivos y en el impacto medioambiental.
· Mantenimiento y desarrollo de la biodiversidad.
· Valoración de las prácticas agrícolas para adaptación y mitigación al Cambio Climático. Cuantificación de GHG.

Docencia

· PRÀCTIQUES INTEGRADES: ENGINYERIA I GESTIÓ DE LA PRODUCCIÓ AGROPECUARIA https://guiadocent.udl.cat/pdf/ca/	**Grado en Ingeniería Agraria y Alimentaria** http://www.geaa.udl.cat/es/
· PRÀCTIQUES INTEGRADES: ENGINYERIA I GESTIÓ https://guiadocent.udl.cat/pdf/ca/	**Grado en Ingeniería Agraria y Alimentaria** http://www.geaa.udl.cat/es/
· TECNOLOGIA DE CULTIUS HERBACIS https://guiadocent.udl.cat/pdf/ca/	**Grado en Ingeniería Agraria y Alimentaria** http://www.geaa.udl.cat/es/
· PROGRAMES DE PROTECCIÓ INTEGRADA DE CULTIUS /sites/Dcefa/es/personal/pdi/carl	**Máster Universitario en Protección Integrada** http://www.ipm.udl.cat/ca/index.h
· AGRONOMIA: SISTEMES AGRÍCOLES https://guiadocent.udl.cat/pdf/12	**Máster Universitario en Protección Integrada** http://www.ipm.udl.cat/ca/index.h

Proyectos y Publicaciones Recientes

Proyectos

Diversificación de Cultivos para la Sostenibilidad de Agrosistemas Mediterráneos (DISOSMED project). Proyecto PNI-CICYT num. AGL2017-84529-C3-3-R. Fechas 2018-2021. IP: Dr. Carlos Cantero Martínez.

Tecnologías innovadoras para diagnóstico, prevención y eliminación de contaminantes emergentes (antibióticos) de las aguas del territorio POCTEFA. (OUTBIOTICS). EU. Interreg EU España-Francia-Andorra. Fechas 2018-2020. Investigador responsable: Dr. Juan Ramón Castillo Suarez.

Proyecto: Increasing productivity and sustainability of European plant protein production by closing the grain legume yield gap (LegumeGap Project). SuSCrop – ERA-NET Cofund on Sustainable Crop Production. FACCEJPI. Fechas 2019-2021. IP en UdL: Dr. Daniel Plaza Bonilla.

Estudio y análisis de la biodiversidad de cultivos y del pago verde “Greening” en la provincia de Lleida en el Horizonte de la futura reforma de la PAC Pots 2020. Projectes competitivos de l’Institut de Desenvolupament Social i territorial de la Universitat de Lleida (INDEST) 2018CRINDESTANC. Fechas: Dic 2018-.Dic 2020. IPs en la UdL. Dr. Antoni Blanc y Dr. Carlos Cantero Martinez.

Proyecto: Research-based participatory approaches for adopting Conservation Agriculture in the Mediterranean Area (CAMA) . PRIMA 2019. Section 1 RIA – Farming Systems 2019. Conserving water and soil in Mediterranean dry-farming, smallholder agriculture. Fechas Abril 2020- Marzo 2023. IP en UdL: Dr. Carlos Cantero Martínez.

Publicaciones

PAREJA-SANCHEZ E., CANTERO-MARTINEZ C., ALVARO-FUENTES J., PLAZA-BONILLA D. 2019. Tillage and nitrogen fertilization in irrigsated maíz: key practices to reduce soil CO2 and CH4 emissions. Soil and Tillage Research, 191: 29-36. https://doi.org/10.1016/j.still.2019.03.007 [https://doi.org/10.1016/j.still.2019.03.007]

FRANCO-LUESMA S., ALVARO-FUENTES A., PLAZA-BONILLA D., ARRUE JL. CANTERO-MARTINEZ C., CAVERO J. 2019. Influence of irrigation time and frequency on greenhouse gas emissions in a solid-set sprinkler-irrigated maize under Mediterranean conditions. Agricultura Water Management, 221: 303-311. https://doi.org/10.1016/j.agwat.2019.03.042 [https://doi.org/10.1016/j.agwat.2019.03.042]

RAMOS CR., PAREJA-SANCHEZ E., PLAZA-BONILLA D., CANTERO-MARTINEZ C., LAMPURLANES. 2019 Soil sealing and soil water content under no tillage and conventional tillage in irrigated corn: Effects on grain yield. Hydrological Processes. DOI: 10.1002/hyp.13457.

PAREJA-SANCHEZ E., PLAZA-BONILLA D., ALVARO-FUENTES J., CANTERO-MARTINEZ C. 2019. Is it feasible to reduce tillage and N use while improving maize yiled in irrigated Mediterranean agroecosystems?. European Journal of Agronomy, 109: 125919 https://doi.org/10.1016/j.eja.2019.125919 [https://doi.org/10.1016/j.eja.2019.125919]

O'LEARY G.J., NUTTALL J.G., REDEN R.J., CANTERO-MARTINEZ C., MINGUEZ M.I. 2019. Adaptation of Cropping Systems to Droght under Climate Change (Examples from Australia and Spain) Chapter 8. Pag. 71-94 . In Yadav SS., Redden RJ., Hatfield JL., Eberrt AW., Hunter D. Food Security and Climate Change. Wiley-Blackwell. 568 Pages Chichester UK. ISBN: 978-1-119-18064-7. DOI: 10.1002/9781119180661.ch4.

ARRUE JL., ÁLVARO-FUENTES J., PLAZA-BONILLA D., VILLEGAS D. CANTERO-MARTINEZ C. 2019. Managing Drylands for Sustainable Agriculture. Chapter 21. Pag. 529-556. In: M. Farooq and M. Pisante (Eds.) Innovations in Sustainable Agriculture. Springer Nature Switzerland AG 2019. 627 Pages. ISBN 978-3-030-23168-2 ISBN 978-3-030-23169-9 (eBook) https://doi.org/10.1007/978-3-030-23169-9_17 [https://doi.org/10.1007/978-3-030-23169-9_17]

ZHU C., FARRE G., ZANGA D., LLOVERAS J., MICHELENA A., FERRIO JP., VOLTAS J., SLAFER G., SAVIN R., ALBAJES R., EIZAGUIRRE M., LOPEZ C., CANTERO-MARTINEZ C., DIAZ-GOMEZ J. NOGAREDA C., MORENO JA. ANGULO E., ESTANY J., PENA RN., TOR M., PORTERO-OTIN M., ERITJA N., ARJO G., SERRANO JCE., MATIAS-GUIU X., TWYMAN RM., SANDMAN G., CAPELL T., CHRISTOU P. 2018. High-carotenoid maize: development of plant biotechnology prototypes for human and animal health and nutrition. Phytochem Rew. 17:195-209. https://doi.org/10.1007/s11101-017-9506-4 [https://doi.org/10.1007/s11101-017-9506-4]

ALVARO-FUENTES J., PLAZA-BONILLA D., ARRUE JL., CANTERO-MARTINEZ C. 2018. Pig slurry incorporation with tillage does not reduce short-term soil CO2 uxeS. Soil & Tillage Research 179: 82–8 https://doi.org/10.1016/j.still.2018.02.002 [https://doi.org/10.1016/j.still.2018.02.002]

PLAZA-BONILLA D., ALVARO-FUENTES J., BARECHE J., PAREJA-SANCHEZ E., JUSTES E., CANTERO-MARTINEZ C. 2018 No-tillage reduces long-term yield-scaled soil nitrous oxide emissions inrainfed Mediterranean agroecosystems: A eld and modelling approach. Agriculture, Ecosystems and Environment, 262: 36–47 https://doi.org/10.1016/j.agee.2018.04.007 [https://doi.org/10.1016/j.agee.2018.04.007]

PLAZA-BONILLA D., NOGUE-SERRA I., RAFFAILLAC D., CANTERO-MARTINES C., JUSTES E. 2018. Carbon footprint of cropping systems with grain legumes and cover crops: A case-study in SW France. Agricultural Systems, 167:92–102. https://doi.org/10.1016/j.agsy.2018.09.004 [https://doi.org/10.1016/j.agsy.2018.09.004]

ALVARO-FUENTES J., ARRUE JL.;BIELSA A.; CANTERO-MARTINEZ C.; PLAZA-BONILLA D., PAUSTIAN K. 2017. Simulating climate change and land use effects on soil nitrous oxide emissions in mediterranean conditions using the Daycent model. Agriculture, Ecosystems and Environment, 238: 78-88. DOI: http://dx.doi.org/10.1016/j.agee.2016.07.017 [http://dx.doi.org/10.1016/j.agee.2016.07.017].

PLAZA-BONILLA D., CANTERO-MARTINEZ C., BARECHE J., ARRUE JL., LAMPURLANES J., ÁLVARO-FUENTES J. 2017. Do no-till and pig slurry application improve barley yield and water and nitrogen use efficiencies in rainfed Mediterranean conditions? 2017. Field Crops Research, 203:74-85. DOI: http://dx.doi.org/10.1016/j.fcr.2016.12.008 [http://dx.doi.org/10.1016/j.fcr.2016.12.008]

PLAZA-BONILLA D., ÁLVARO-FUENTES J., BARECHE J., MASGORET A., CANTERO-MARTINEZ C. 2017. Delayed Sowing Improved Barley Yield in a No-Till Rainfed Mediterranean Agroecosystem. Agronomy Journal, 109:1249-1260. https://doi.org/0.2134/agronj2016.09.0537 [https://doi.org/0.2134/agronj2016.09.0537]

PAREJA-SANCHEZ E., PLAZA-BONILLA D., RAMOS MC., LAMPURLANES J., ALVARO-FUENTES J., CANTERO-MARTINEZ C. 2017. Long-term no-till as a means to maintain soil surface structure in an agroecosystem transformed into irrigation. Soil and Tillage Research, 174:221-230. https://doi.org/10.1016/j.still.2017.07.012 [https://doi.org/10.1016/j.still.2017.07.012]

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CANTERO-MARTINEZ C.; PLAZA-BONILLA D.; ANGAS P.; ALVARO-FUENTES J. 2016. Best management practices of tillage and nitrogen fertilization in Mediterranean rainfed conditions: Combining field and modelling approaches. European Journal of Agronomy, 79:119-130. DOI: http://dx.doi.org/10.1016/j.eja.2016.06.010 [http://dx.doi.org/10.1016/j.eja.2016.06.010].

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PLAZA-BONILLA D., ARRUE JL., 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

ALVARO-FUENTES J., PLAZA-BONILLA D., ARRUE JL., 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.

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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., ARRUE JL., CANTERO-MARTINEZ C. 2014. Tillage and nitrogen fertilization effects on nitrous oxide yield-scaled emissions in a rainfed Mediterranean área. Agriculture, Ecosystems and Environment,189:43-52. http://dx.doi.org/10.1016/j.agee.2014.03.023 [http://dx.doi.org/10.1016/j.agee.2014.03.023]

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., CANTERO-MARTINEZ C., BARECHE J., ARRUE JL. ÁLVARO-FUENTES J. 2014. Soil carbon dioxide and methane fluxes as affected by tillage and N fertilization in dryland conditions. Plant and Soil, 381: 111-130. DOI: 10.1007/s11104-014-2115-8

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

ARRÚE JL, ÁLAVARO-FUENTES J, CANTERO-MARTINEZ C, PLAZA-BONILLA D. 2014. Beneficios agroambientales de la reducción del laboreo en los secanos semiáridos del valle del Ebro, pp. 373-382. En: J Arnáez, P González-Sampériz, T Lasanta y B L Valero Garcés (editores), Geoecología, cambio ambiental y paisaje: homenaje al profesor José María García-Ruiz. Instituto Pirenaico de Ecología (CSIC) y Universidad de La Rioja, Logroño 2014 (ISBN: 978-84-96487-83-3).

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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.

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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.

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ALVARO-FUENTES J., MORELL FJ., PLAZA-BONILLA D., ARRUE JL., CANTERO-MARTINEZ C., 2012. Modelling tillage and nitrogen fertilization effects on soil organic carbon dynamics. Soil and Tillage Res., 120: 32-39.

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MORELL FJ., CANTERO-MARTINEZ C., LAMPURLANES J., PLAZA-BONILLA D., ÀLVARO-FUENTES J. 2011. Soil Carbon Flux and Organic Carbon Content: Effects of tillage and nitrogen fertilization. Soil Sci. Soc. Am. J. 75:1874-1884.

ÁLVARO-FUENTES J., EASTER M., CANTERO-MARTINEZ 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.

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Per mes informació (Consultes GREC [http://webgrec.udl.cat/cgi-bin/DADREC/crgen.cgi?FONT=3&IDI=CAT&PID=367567&IDNC=201210161350170])