



Sweet Sorghum an alternative energy Crop



GA n° 227422



WP 7

Deliverable 7.4:

*Articles published in press and
international scientific journals*

Composition of the consortium

CIRAD
ICRISAT
EMBRAPA
KWS
IFEU
UniBO
UCSC
ARC-GCI
UANL
WIP

List of the published articles, oral presentations, poster presentations and press releases on SWEETFUEL

Articles

• Gutjahr S., Clément-Vidal A., Soutiras A., Sonderegger N., Braconnier S., Dingkuhn M., Luquet. D. - 2013 - Grain, sugar and biomass accumulation in photoperiod-sensitive sorghums.II. Biochemical processes at internode level and interaction with phenology. Accepted in Functional Plant biology

• Gutjahr S., Vaksman M., Dingkuhn M., Thera K., Trouche G., Braconnier S., Luquet. D. -2013 - Grain, sugar and biomass accumulation in tropical sorghums. I. Trade-offs and effects of phenological plasticity. Accepted in Functional Plant biology

• Rao PS, Deshpande S, Blümmel M, Reddy BVS, Hash T. 2012. Characterization of brown midrib mutants of sorghum (*Sorghum bicolor* (L.) Moench). The European Journal of Plant Science and Biotechnology, 6 (Special issue 1), 71-75.

• Rao PS, Blümmel M, Reddy BVS. 2012. Enhancement of *in vitro* digestibility of sorghum (*Sorghum bicolor* (L.) Moench) in brown midrib (*bmr*) mutant derivatives of *bmr1* and *bmr7*. The European Journal of Plant Science and Biotechnology, 6 (Special issue 1), 76-80.

• Zegada-Lizarazu W., Zatta A., Monti A. (2012; Submitted) Morpho-physiological response of sweet sorghum to drought and rewatering. Environmental and Experimental Botany

• Zegada-Lizarazu W., Monti A. 2012. Are we ready to cultivate sweet sorghum as a bioenergy feedstock? A review on field management practices. Biomass and Energy, 40: 1-12.

• Zegada-Lizarazu W., Zatta Z. Monti A. 2012. Water uptake efficiency and above- and belowground biomass development of sweet sorghum and ethanol maize under different water regimes. Plant and Soil, 351: 47-60.

• Gutjahr S, Clément-Vidal A, Trouche G, Vaksman M, Thera K, Sonderegger N, Braconnier S, Dingkuhn M, Luquet D. (2010) Functional analysis of sugar accumulation in sorghum stems and its competition with grain filling among contrasted genotypes. In 'Proceedings of Agro 2010: the XIth ESA Congress, August 29th - September 3rd, 2010, Montpellier, France'. Montpellier. (Ed. S-TIPA Wery Jacques) pp. 89-90. (Agropolis international)

• Parentoni S. N; de Souza Junior C. L; Alves V. M. C; Gama EEG, Coelho A. M; Oliveira A. C de; Guimarães P. E. O; Guimarães C. T.; Vasconcelos M. J. V; Pacheco C. A. P; Meirelles W. F; Magalhães, J. V. Guimarães L. J. M; Silva A. R, Mendes F. F; Schaffert R. E. 2010. Inheritance and breeding strategies for phosphorus efficiency in tropical maize (*Zea Mays* L.). Maydica vol. 55: p. 1-15.

Oral presentations

- Braconnier, S (CIRAD) 2012. Sweet sorghum: a good opportunity to produce bio-ethanol ?. Communication at the IV International Congress of Phytogenetic, Monterrey (Mexico), 24-28 September 2012.

- Braconnier, S (CIRAD) 2012. Sweet Sorghum: a smart solution for bioethanol production? . Communication at the 9th international conference “Fuels for the future. 2012, 23-24 January, Berlin.

- Rettenmaier, N. (IFEU) 2011. Environmental implications associated with sweet sorghum production and use for biofuels. EUROCLIMA Workshop on the agro-environmental impact of biofuels and bioenergy (organised by JRC, UNICAMP & CTBE), Campinas, Brazil, 30 November – 1 December 2011, http://re.jrc.ec.europa.eu/biof/pdf/euroclima_brazil/rettenmaier_lca-biodiesel.pdf, 2011

- R. Schaffert (EMBRAPA) 2011. “Breeding Strategies for Sorghum as a Feedstock for First and Second Generation Technologies for Production of Bioenergy in Brazil”, oral presentation at the 6th Frontiers in Bioenergy: United States-Brazil Symposium on Sustainable Bioenergy, May 15-18, 2011 Purdue University in West Lafayette, Indiana, USA.

- S. Braconnier (CIRAD) 2011. “Development of new sorghum ideotypes to meet the increasing demand of bioethanol” oral presentation at CIMAC (Crop Improvement, Ideotyping, and Modelling for African Cropping Systems under Climate Change) Workshop at University of Hohenheim, Germany, 7-9 February 2011.

- S. Köppen, Dahms, T. (IFEU) 2011. Environmental Implications of Sweet Sorghum Bioethanol. Published in: W.J. Bartz [Hrsg.] (2011): Fuels 2011 - Conventional and Future Energy for Automobiles, 8th International Colloquium, January 19 - 20, 2011, Technische Akademie Esslingen, p. 335-342, ISBN 9783924813864, 2011.

- Monti A. (2010) Il progetto SWEETFUEL - Sweet sorghum: an alternative energy crop. “Agroenergie e biocarburanti: le tecnologie e le prospettive di nuovi modelli energetici sostenibili” Green Energy Conference 17-19 Nov., 2010, Milano. Italy. http://www.pytech.eu/it_esp/conf_2010.asp?conf=BIO

- S. Braconnier (CIRAD) 2010. SWEETFUEL presentation at the second annual meeting of the FP7 project “4F Crops”, in The Netherlands, March 2010

- R. Janssen and D. Rutz (WIP) 2010. Sweet sorghum: an alternative energy crop. 18th European Biomass Conference and Exhibition in Lyon, France, May 2010

- S. Köppen (IFEU) 2010. Sweet Sorghum first and second generation bioethanol – an environmental perspective. 6th International Conference on Biomass for Energy, Kyiv, 14 - 15 September 2010. Conference proceedings published on CD, to be ordered via <http://biomass.kiev.ua/en/en/conferences> or conference@biomass.kiev.ua.

- S. Braconnier (CIRAD) 2010. SWEETFUEL presentation at a round table of the 4th International Exhibition on Renewable Energies at Montpellier, 8-11 December 2010.

- F. Zavala (UANL) 2010. “Biotechnological Crops for Food, Forage and Bioenergy” at Biocumbre Monterrey Congress, 16-17 November 2010, Monterrey, Mexico.

- R. Janssen (WIP) 2010. “Sweet Sorghum: An Alternative Energy Crop” in Proceedings of the 19. Symposium BIOENERGIE, 25-26 November 2010, Bad Staffelstein, Germany.

- R. Schaffert (EMBRAPA) 2010. Presentation of six seminars to ethanol producers and researchers in three different geographic regions of Brazil (South, Southeast and Central West) to explain advantages of using sweet sorghum to increase the length of the industrial processing using both sugarcane (7 – 8

months) and sweet sorghum for an additional 1 – 3 months.

- S. Braconnier (CIRAD) 2009. Presentation and participation of SWEETFUEL at the EU-India Scientific and Technical Days in New Delhi, India, November 2009

- F. Zavala (UANL) 2009. SWEETFUEL presentation at the Annual Meeting of the RED MEXICANA DE BIOENERGIA (Mexican Net of Bioenergy) in Mexico, November 2009

- M. Dingkuhn (CIRAD) 2009. SWEETFUEL presentation at the Seminar “Land Resources and land use options”, in Goettingen, Germany, July 2009

- S. Braconnier (CIRAD) 2009. SWEETFUEL presentation in the framework of the Twinning programme “Soil, Plant and Food Research between the EU, Argentina and MERCOSUR”, in Argentina, 7-8 May 2009

- S. Braconnier (CIRAD) 2009. SWEETFUEL presentation at the first meeting of the FP7 project “4F Crops” in Madrid, Spain, March 2009

Posters

- Walter Zegada-Lizarazu, Alessandro Zatta, Lorenzo Nissen, Andrea Monti about Sweet sorghum root and canopy responses to water deficit occurring at different growth stages to be presented at International Society of Root Research (ISRR) Meeting to be held from 26-29 June 2012 in Dundee, Scotland

- Zegada-Lizarazu W, Vecchi A, Zatta A, Luna F, Monti A about the Response of three commercial biomass sorghum hybrids to cold stress in northern Italy to be presented at the 12th Congress of the European Society for Agronomy to be held in Helsinki, Finland, 20-24 August 2012

- S. Braconnier (CIRAD) 2011. “Definition of new sorghum ideotypes to meet the increasing demand of bioenergy”. Poster presented at the 19th European Biomass conference and Exhibition in Berlin, Germany, 6-10 June 2011.

- W. Snijman (ARC-GCI) 2011 SWEETFUEL presentation (flyer) at the NAMPO Agricultural Show in Bothaville, South Africa , 17-20 May 2011.

- XXII EUCARPIA Maize and Sorghum Conference, that took place on June 19-22, 2011 at Opatija, Croatia

- S. Rao and B. VS Reddy (ICRISAT) 2010. “Identification of midseason moisture stress tolerant sweet sorghum material” poster presented at National Seminar on Millets “Research and Development in millets- present status and future strategies” 12 November, 2010 in NIRD, Rajendranagar, Hyderabad, India. Poster was awarded certificate of appreciation.

- S. Guthjar et al. (CIRAD) 2010. “Functional analysis of sugar accumulation in sorghum stems and its competition with grain filling among contrasted genotypes” poster presented at Agro 2010 Symposium, Montpellier, 28/08 to 03/09/2010.

- F. Zavala (UANL) 2010. SWEETFUEL presentation (poster display) at the University of Nuevo Leon, Mexico on the occasion of the university research open days.

- R. Janssen (WIP) 2009. Presentation (poster) of SWEETFUEL at the 17th European Biomass conference and Exhibition in Hamburg, Germany, June/July 2009

Press releases

- S. Braconnier (CIRAD) 2010. Contribution to the Film "To feed a World" for a regional TV station (in French) available at <http://www.capcanal.com/videos.php?rubrique=5&emission=4>.

- S. Braconnier (CIRAD) 2010. SWEETFUEL publication in the on-line Magazine Research Media, "Sweet sorghum: a suitable alternative energy crop", Edition December 2010 'Rebuilding trust in the food supply chain'

- S. Braconnier (CIRAD) 2009. Radio interview of the coordinator broadcasted in West Africa on 19, May 2009 by The Voice of America Radio

- S. Braconnier (CIRAD) 2009. SWEETFUEL presentation in Green Techno N° 14, p3, 24/04/2009

- S. Braconnier (CIRAD) 2009. SWEETFUEL presentation at the web portal of European Plant Science Organization (<http://www.epsoweb.org/Catalog/projects/FP7projects/FP7-Sweetfuel.htm>)

Participation in meetings/conferences

- R. Janssen (WIP) 2011. SWEETFUEL participation at the project meeting of the FP7 project NEMO (Novel High Performance Enzymes and Micro-organisms for Conversion of Lignocellulosic Biomass to Bioethanol), 7-9 November 2011, Frankfurt, Germany.

- R. Janssen (WIP) 2011. SWEETFUEL participation at the XIX ISAF (International Symposium on Alcohol Fuels) and 2nd International Conference on Lignocellulosic Ethanol, 10-14 October 2011, Verona, Italy.

- R. Janssen and D. Rutz (WIP) 2011. SWEETFUEL participation at the meeting of the FP7 project Global-Bio-Pact (Global Assessment of Biomass and Bioproduct Impacts on Socio-economics and Sustainability) in Bamako, Mali, 26-30 September 2011.

- R. Janssen and D. Rutz (WP) 2011. SWEETFUEL participation at the GTZ/DED/InWEnt conference on decentralised energy solutions for developing countries in Bonn, Germany, 10-12 January 2011.

- D. Rutz (WIP) 2011. SWEETFUEL participation at the Mitteleuropäische Biomassekonferenz 2011 in Graz, Austria, 26-29 January 2011.

- R. Janssen (WIP) 2011. SWEETFUEL participation at the GIZ Expert discussion "Biofuel feedstock potential in East Africa" in Eschborn, Germany, 8 February 2011.

- R. Janssen and D. Rutz (WIP) 2011. SWEETFUEL participation at the meeting of the FP7 project Global-Bio-Pact (Global Assessment of Biomass and Bioproduct Impacts on Socio-economics and Sustainability) in Medan, Indonesia, 14-17 March 2011.

- R. Janssen and D. Rutz (WIP) 2011. SWEETFUEL participation at the EC Workshop International Cooperation Projects in Support to Research and Innovation Policies and Competence Building in

Brussels, Belgium, 16-17 June 2011.

- D. Rutz (WIP) 2010. SWEETFUEL participation at the Annual Meeting of the RED MEXICANA DE BIOENERGIA (Mexican Net of Bioenergy) in Mexico, October 2010.

- R. Janssen (WIP) 2010. SWEETFUEL participation at the First Canada-Europe-Australia-New Zealand Workshop on Biotechnologies for Biorefineries and Biobased Materials, 6-7 October 2010, Saskatoon, Canada.

- R. Janssen and D. Rutz (WIP) 2010. SWEETFUEL participation at the meeting of the FP7 project Global-Bio-Pact (Global Assessment of Biomass and Bioproduct Impacts on Socio-economics and Sustainability) in Turrialba, Costa Rica, 7-10 September 2010.

- R. Janssen 2009. SWEETFUEL participation at the conference “Biofuel Markets West Africa” in Accra, Ghana, October 2009

- R. Janssen (WIP) 2009. SWEETFUEL participation at the COMPETE Financing Conference in Dakar, Senegal, September 2009

Organization of workshops

Monti A., and Braconnier S. (Chairs; 2012) 2G Bioethanol production: Technological development and agroenvironmental and economic implications. 18 Aprile 2012 Sala Ulisse - Accademia delle Scienze. Bologna, Italy. www.unibo.it/Ricerca/2GBioethanolProduction