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Poster Programme

1 Efficiency and sustainability

- 1.1 Smit, A.B. The effects of a new sugar regime reform on triple-P aspects of sugar (beet) production in different parts of the world
- 1.2 Gallasch, M., N. Stockfisch Costs and ecoefficiency on sugar beet growing farms
- 1.3 Khan, M. How do we improve sugar beet productivity by 2020?
- 1.4 Qi, A., K. Jaggard Sugar beet yield in England under an extreme climate change scenario
- 1.5 Kremer, P., C. Lang, H.J. Fuchs Possible impacts of the climate change on the sugar beet crop yields in Rhenish-Hesse and the Palatinate
- 1.6 Trimpler, K., H. Reineke, N. Stockfisch The influence of nitrogen fertilizer application on CO_{2e}-emissions in sugar beet production
- 1.7 Cariolle, M., A. Viard 'NO GAS': Measurements and modelling of N₂O in main crops under French conditions
- 1.8 Ciuffreda, G., M. Sandonà, R. Giovanardi An assessment of energy inputs and greenhouse gas emissions in Po Valley: comparison among sugar beet, corn and tomato

2 Breeding and seeds

- 2.1 Richard, B. How sustainability is taken in account in French official trials for variety registration
- 2.2 Townsend, B., E. Mutasa-Göttgens Applying systems biology in sugar beet to increase crop value
- 2.3 Lucas, S., S. Vanstraelen, M. Lommel, G. Weyens, S. Barnes, M. Lefebvre, L. Sterck, Y. Van de Peer, A. Sharpe, C. Tallon, K. Koh Insertion sites of transgenes in the sugar beet genome
- 2.4 Harper, S. Changes in viability and germination speed of primed sugar beet seed during storage, revealed through both laboratory and field studies
- 2.5 Odunlami, B., S. Harper The effect of priming and coating on sensitivity of sugar beet seed to low oxygen tensions
- 2.6 Harper, S. H. Webb, R. Clarke Speed and uniformity of sugar beet seed germination determined by automated image capture and time course analysis

3 Fertilisation and nutrient availability

- 3.1 Elfström, K. New ways of promoting actions to increase sugar yield – a Swedish example
- 3.2 Fischer, S., H.-J. Koch, K. Bürcky Influence of calcium on plant available nutrients in sugar beet soils – field trials in Central and Southern Germany
- 3.3 Lemme, H., K. Bürcky, H.-J. Koch Influence of calcium on plant available nutrients in sugar beet soils – laboratory and greenhouse experiments
- 3.4 Jacobs, A. H.-J. Koch Interaction of pre-crop effects and nitrogen fertilization in sugar beet production
- 3.5 Hetterich, T., F. Fürstenfeld, K. Bürcky Long year development of potassium in sugar beets soils by means of EUF in Southern Germany
- 3.6 Hetterich, T., F. Fürstenfeld, K. Bürcky Long year development of phosphorous in sugar beet soils by means of EUF in Southern Germany
- 3.7 Fürstenfeld, F., T. Hetterich, D. Horn Evaluation of nitrogen from intercrops for sugar beets



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- 3.8 Appel, T., J. Seelig, K. Venn, D. Horn Boron availability for sugar beets as related to boron fertilization, liming and the carbonate content of soils
- 3.9 Eigner, H., F. Kempl, D. Horn Organic soil matter as characteristic parameter of Austrian sugar beet areas
- 3.10 Schlinker, G. Fertilisation of sugar beets with the digestate of biogas plants
- 3.11 Potyondi, L., J. Kimmel, F. Csima Nutrition with biogas sludge from fermentation of sugar beet pressed pulp in Sugar factory Kaposvar
- 3.12 Saadaoui, N., A. Hailaf, K. Fares Promoting the sustainable sugar beet crop by using lime sludge compost as an organic fertilizer

4 Management improvements

- 4.1 Kempl, F., G. Klinghofer, U. Fischer Organically grown beets? A growing segment in the Austrian sugar production
- 4.2 Sigl, G., E. Rauchberger, H. Refenner, H. Eigner, P. Liebhard Effects of different soil management systems on yield and quality of sugar beet in a long-term trial
- 4.3 Lassen, N. Strip-tillage and sugar beet seed
- 4.4 Wenninger, E., O. Neher, H. Neibling, D. Morishita Soil water content, disease, insect, and weed response in strip-till sugar beet
- 4.5 Nübel, V., K. Bürcky Strip till sugar beet at Südzucker
- 4.6 Bürcky, K., P. Risser Water as limiting factor for future yield increase in sugar beet
- 4.7 Legrand, G., A. Wauters Early sowing of sugar beets in Belgium: possibilities of application and yield response

5 Harvest, storage and winter beet

- 5.1 Legrand, G. Sugar beet clamp covering in Belgium: possibilities of protection by heavy frost
- 5.2 Eigner, H., W. Hein, F. Kempl, G. Sigl Storability of different sugar beet varieties
- 5.3 Curcic, Z., D. Danojevic, N. Nagl, K. Taski-Ajdukovic, L. Kovacev Effect of interaction between harvest date and sugar beet varieties on root yield and sugar content
- 5.4 Hein, W. Comparison of models for the prediction of the technological beet quality
- 5.5 Loel, J., C. Hoffmann Winter beets – yield formation and quality for biogas production
- 5.6 Reinsdorf, E., H.-J. Koch Variation in frost tolerance of winter beet (*Beta vulgaris*) due to phenotype
- 5.7 Chiurugwi, T., H. Holmes, A. Qi, T. Chia, E. Mutasa-Göttgens Development of molecular parameters for the beet vernalisation-intensity bolting model
- 5.8 Pin, P.A., E. Wremerth-Weich, J. Gielen, O. Nilsson, T. Kraft Flowering time control in beets
- 5.9 Ezzahiri, B., L. Moughli Sugar extraction problem from autumn sown sugar beet in the Gharb and Loukkos irrigated regions of Morocco in 2011



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6 Integrated Pest Management

- 6.1 Ladewig, E. Development of guidelines for the integrated pest management in sugar beet and exemplary investigation of ecological and economical impacts of innovative use of plant protection products
- 6.2 Gutsche, V., J. Strassemeyer Modelling environmental risk of chemical plant protection strategies in sugar beets by means of model SYNOPS
- 6.3 Marwitz, A., E. Ladewig Environmental fate and risk assessment of herbicide strategies in sugar beet crop in Germany
- 6.4 Marwitz, A., E. Ladewig Response of earthworm population on herbicide application intensities within a conventional and a reduced tillage system in sugar beet crop in Germany
- 6.5 Marwitz, A., E. Ladewig Response of biological activity of edaphic community on herbicide application intensities within a conventional and a reduced tillage system in sugar beet crop in Germany
- 6.6 Fischer, F., U. Heimbach Impact of different herbicide strategies in sugar beet on epigeic predatory arthropods
- 6.7 Vasel, E.-H., E. Ladewig Derivation of herbicide strategies in sugar beet
- 6.8 Thomsen, J.N. Development of weeding systems – state of art in Denmark
- 6.9 Royer, C. Possibilities to reduce the use of chemical herbicides by using complementary mechanical tools in sugar beet crop
- 6.10 Kaya, R. Possibilities of reducing herbicide use in weed control of sugar beet
- 6.11 Pérez, A., M. Rodríguez, J.M. Hernández, J. Ayala Results on the detection of populations of *Chenopodium* spp. less sensitive to herbicides in sugar beet in Spain. Practical approach for its control
- 6.12 Varrelmann, M., A.-V. Kalfa, H. Thiel Resistance of *Chenopodium album* to herbicides that inhibit photosynthesis at PSII – basic mechanisms

7 Fungal diseases

- 7.1 Olsson, Å., L. Persson Management of leaf diseases in Sweden
- 7.2 Champeil, A. Strategy for foliar disease management
- 7.3 Risser, P., K. Bürcky Securing white sugar yield by threshold-based control of foliar diseases in sugar beet
- 7.4 Kempl, F., C. Tomasetig, S. Gotsmi Effects of triazols and strobilurins on the spreading of *Cercospora*
- 7.5 Kimmel, J., L. Potyondi Fungicide resistant *Cercospora* strains in Hungary
- 7.6 Campagna, G., P. Pernici, G. Maines, S. Moretti Monitoring *Cercospora* leaf spot in eastern Po Valley during 2011
- 7.7 Tunali, B., R. Kaya, F. Topal, Y. Tokgöz, B. Kansu, N.D. Kutluk Yilmaz Distribution and pathogenicity of *Cercospora* leaf spot on sugar beet in some provinces of Turkey
- 7.8 Thach, T., A.L. Hansen, L. Nistrup Jørgensen, L. Munk Disease variation and chemical control of *Ramularia* leaf spot in sugar beet
- 7.9 Persson, L. Sugar beet as pre crop to wheat
- 7.10 Gollnow, M., M. Varrelmann, D. Christ Saprotrophic colonisation of sugar beet with different *Fusarium* spp.
- 7.11 Dircks, C., J. Nechwatal, K. Bürcky, M. Zellner, M. Varrelmann Integrated measurements to control the *Rhizoctonia* late crown and root rot of sugar beet



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- 7.12 Franke, L., K. Bürcky, U. Steiner, M. Varrelmann, C. Dircks Experimental approaches for quantification of *Rhizoctonia solani* AG 2-2IIIB inoculum potential in soil
- 7.13 Boine, B., J. Nechwatal, C. Dircks, K. Bürcky, R. Apfelbeck, M. Varrelmann, M. Zellner Evaluation of methods based on indicator plants and quantitative PCR to estimate *Rhizoctonia solani* AG 2-2IIIB soil inoculum density in a maize-sugar beet crop rotation
- 7.14 Leclerc, M., J.A.N. Filipe, S. Poggi, T. Doré, F. Montfort, P. Lucas, D.J. Bailey Epidemiological analysis of the effects of biofumigation on the spread of *Rhizoctonia solani* in sugar beet
- 7.15 Stojsin, V., F. Bagi, D. Budakov, B. Marinković, N. Nagl Sugar beet root rot in Serbia
- 7.16 Chaudhary, M., S.K. Ghosh, M.S. Prabhakar Bioefficacy of microbial antagonist NIPRO (*Trichoderma viride*) and Su-Mona (*Pseudomonas fluorescens*)

8 Nematode control

- 8.1 Liesenfeld, S., B. Augustin, K. Müller, C. Lang The significance of winter rape seed for the propagation of *Heterodera schachtii*
- 8.2 Hartmann, E., C. Wendel, C. Lang Results and consequences of the nematode monitoring in southwestern Germany
- 8.3 Liesenfeld, S., K. Müller, H. Bauer, C. Lang Nematode propagation in sugar beet varieties with varying resistance and tolerance
- 8.4 Meinecke, A., A. Hermann, K. Ziegler, K. Bürcky, A. Westphal Is there a relationship between shallow and deep occurring populations of *Heterodera schachtii* in long-term sugar beet soils?
- 8.5 Meinecke, A., K. Ziegler, K. Bürcky, A. Westphal Reproductive potential of *Heterodera schachtii* on typical weeds in cereal stubble fields before sugar beet culture
- 8.6 Sigl, G., G. Bodner, F. Grundler Are nematode tolerant varieties drought tolerant too?

9 Virus diseases

- 9.1 Thiel, H., M. Varrelmann What is the role of the Bv-IAA candidate interacting and co-localizing with Beet necrotic yellow vein virus (BNYVV) pathogenicity factor?
- 9.2 Galein, Y., N. Desoignies, M. Richard-Molard, H. Escriou, A. Champeil, C. Bragard Deep sequencing reveals distinct patterns of isolates between susceptible, Rz1, Rz1Rz2 sugar beet varieties from the same field
- 9.3 Stevanato, P. Discovering molecular markers linked to rhizomania resistance in sugar beet
- 9.4 Kutluk Yilmaz, N.D., H. Mennan, E. Kaya Altop A new natural weed host for Beet necrotic yellow vein virus and its vector *Polymyxa betae* Keskin from Turkey: *Raphanus raphanistrum* L. (Crucifera)