

## Poster Session – Tuesday, 24 July 2018

### Advances in Silage Research

- TU-1: Application of opto-chemical sensing technology for measuring oxygen in the gas atmosphere of grass-silage during fermentation and under aerobic stress conditions  
R. Resch, M. Tscherner, M. Schweiger, S. Köstler
- TU-2: Can lucerne silage replace grass silage in Nordic climate?  
A. Sairanen, A. Palmio
- TU-3: Cutting herbage PM or AM and subsequent effects on silage quality  
U. Wyss
- TU-4: Development of a preservative for moist hay to extend the hay baling window  
S. Rahn, G. Marley
- TU-5: Different models of laboratory mini-silos for the study of the fermentation of Lucerne silage  
L. C. Solórzano, L. L. Solórzano, A. A. Rodríguez
- TU-6: Evaluation of a new aerobic preservation solution for high moisture hay  
A. Palmonari, D. Cavallini, A. Formigoni, E. Chevaux
- TU-7: Extension of the biological relevance of the Rostock Fermentation Test by curve fitting and interpretation  
A. Zeyner, S. Hoedtke, S.D. Martens, O. Steinhöfel, M. Wensch-Dorendorf
- TU-8: How do time of fermentation and lactic acid bacteria inoculation influence microbial succession during ensiling?  
P. Drouin, F. Chaucheyras
- TU-9: Microbial ecology, fermentation, and aerobic stability of conventional and BMR corn hybrids ensiled at high moisture with or without a homo and hetero-fermentative inoculant  
J. J. Romero, J. Park, Y. Joo, Y. Zhao, M. A. Balseca-Paredes, E. Gutierrez-Rodriguez, M. S. Castillo
- TU-10: Prediction curve for production of silage effluent based on raw materials dry matter content  
M.D. Megías, J.A. Cano, M. Valverde, J. Madrid, A. Martínez-Teruel, S. Martínez, M.F. Hernández
- TU-11: Relations between silage composition, its metabolome and preference shown by goats  
R. Scherer, K. Gerlach, K.-H. Südekum

TU-12: Screening of traditional and novel spring maize genotypes for quality silage production  
N. Khan, N. A. Khan

TU-13: The effect of bacterial inoculant and packing density on corn silage quality and safety  
G. Copani, K.A. Bryan, N.G. Nielsen, K.L. Witt, O. Queiroz, F. Ghilardelli, F. Masoero, A. Gallo

### **Economic Issues**

TU-14: Oxidative loss of dry matter during storage of grass silage in bunker silos on livestock farms  
D.R. Davies, J.M. Wilkinson

### **Miscellaneous**

TU-15: Changes in pH and chemical composition of fungi-treated wheat straw, stored anaerobically, with or without additives  
L. Mao, A.S.M. Sonnenberg, W.H. Hendriks, J.W. Cone

TU-16: Chemical composition of silages produced in Mecklenburg-Western Pomerania  
S. Hoedtke, S. Milhareck, M. Dunker

TU-17: Determination of the fermentation characteristics and nutritive value of mixed alfalfa and sweet corn stalk silages ensiled at six ratios  
M. Wang, Z. Wu, Z. Yu

TU-18: Fermentative profile, microbial and chemical characteristics and aerobic stability of whole crop soybean silage affected by the stage of growth and inoculation with lactic acid bacteria  
E. Tabacco, L. Comino, A. Revello-Chion, G. Borreani

TU-19: Grass silage for biorefinery – Effects of type of additive and separation method  
M. Rinne, P. Timonen, T. Stefanski, M. Franco, M. Vainio, E. Winquist, M. Siikaho

TU-20: Influence of ensiling and thermal treatment of peas on their feed value  
C. Kuhnitzsch, S.D. Martens, O. Steinhöfel, M. Bachmann, M. Bochnia, A. Zeyner

TU-21: Laboratory silo type and inoculation effects on nutritional composition, fermentation, and bacterial and fungal communities of oat silage  
J.J. Romero, Y. Zhao, M. A. Balseca-Paredes, Y. Joo, J. Park, F. Tiezzi, E. Gutierrez-Rodriguez, M.S. Castillo

- TU-22: Nutritive value and fermentation characteristics of sweet sorghum silage  
J.M.B. Vendramini, J. Erickson, M.L.A. Silveira, A.D. Aguiar, J.M.D. Sanchez,  
W.L. da Silva, H.M. da Silva
- TU-23: Reducing hydrocyanic acid in roots and leaves of cassava by ensiling  
J.G. Zhang, L. Zhu
- TU-24: True protein conservation in a forage legume comparing drying to ensiling  
S.D. Martens, E. Thate, A. Zeyner, O. Steinhöfel

### **Silage Technology and Management**

- TU-25: 1968 – 2018: 50 years Silopress. A German idea for conservation and storage of agricultural products in large plastic bags: a review  
W. Büscher, C. Maack, O. Steinhöfel, E. Kaiser, U. Weber, G. Weber, H. Auerbach
- TU-26: A pH index as a method to identify aerobic deterioration in farm maize silage  
G. Gervásio, I. De Oliveira, E. Tabacco, F. Ferrero, G. Borreani, T. Bernardes
- TU-27: A survey of maize hybrids for whole-plant silage in a hot climate  
M. Bastos, L. Lima, J. Gusmão, M. Cardoso, C. Avila, T. Bernardes
- TU-28: An interpretation of gas pressure dynamics based on the observation of multi-parameter during silage production  
G. Shan, M. Li, H. Zhou, W. Buescher, C. Maack, A. Lipski, D. Grantz, Y. Sun, Q. Cheng
- TU-29: Assessment of on-farm NIRS methodologies for predicting grass silage quality; A comparison of face measurements with cored mixed sample analysis  
D.R. Davies, G.K. Davies, K. Le Cocq
- TU-30: Baled whole crop wheat silage: Harvesting losses, bale density and silage quality  
A. Johansen, A.K. Bakken, A. Langerud, R. Borchsenius, S. Heggset, A. Haugnes
- TU-31: Characteristics of *Pediococcus pentosaceus* Q6 isolated from *Elymus nutans* growing on the Tibetan Plateau and its application for silage preparation at low temperature  
D.M. Xu, W.C. Ke, P. Zhang, X.S. Guo
- TU-32: Comparison of whole crop triticale-pea, triticale-grass and triticale-oat blends as forage sources at six different phenological stages  
Sz. Orosz, J. Kruppa, J. Kruppa Junior, A. Halász, D. Szemethy, R. Hoffmann, G. Bencze, Z. Futó

- TU-33: Construction and calibration of a hand penetrometer to estimate crop density at the silo face  
C. Maack, B. Hilgers, W. Büscher
- TU-34: Determination of water-soluble carbohydrates in forages – comparison of methods  
K. Weiß, M. Alt, G. Sommer, B. Kroschewski, W. Richardt, R. Wein, C. Kalzendorf
- TU-35: Development of calibrations for hand-held NIRs instrumentation to measure silage density from the open face of grass silage clamps  
D.R. Davies, G.K. Davies, C. Piotrowski
- TU-36: Dry matter losses and nutrient changes in grass and maize silages stored in bunker silos  
B. Köhler, F. Taube, J. Ostertag, S. Thurner, C. Kluß, H. Spiekens
- TU-37: Effect of early feed out and additive treatment onto maize silage  
A. Milimonka, G. Glenz, G. Römer, T. Ohlmann, W. Richardt
- TU-38: Effect of ensiling on fermentation profile and corn silage processing score in whole-plant corn  
M.C.N. Agarussi, V.P. Silva, W.I. Silva Filho, D.Vyas, A.T. Adesogan, L.F. Ferraretto
- TU-39: Effect of length of storage and sodium benzoate use on in-vitro parameters of sorghum grain silages  
W.P. Santos, G.G.S. Salvati, L.H.C. Santos, V.C. Gritti, M.A. Fioravanti, M. Natera, B.A.V. Arthur, J.L.P. Daniel, L.G. Nussio
- TU-40: Effect of maturity at harvest on fermentation profile and starch digestibility of corn silage hybrids in Florida  
K.G. Arriola, D. Vyas, T. Fernandes, F.X. Amaro, I. Ogunade, Y. Jiang, D.H. Kim, M.C.N. Agarussi, V.P. Silva, A.A. Pech-Cervantes, L.F. Ferraretto, A.T. Adesogan
- TU-41: Effect of shredding on silage density and the fermentation characteristics  
M. B. Samarasinghe, M. Larsen, M. Johansen, M. R. Weisbjerg
- TU-42: Effect of shreddage maize harvesting technology on fermentation parameters, packing densities and aerobic stability of maize crop ensiled in bunker silos  
K. Huenting, M. Schneider, H. Spiekens, M. Pries
- TU-43: Effects of different moisture levels on fermentation quality and aerobic stability of sweet potato residue TMR silage  
P. Tian, D. Niu, D. Jiang, R. Li, F. Yang, C. Xu

- TU-44: Effects of lactic acid bacteria inoculants on fermentation quality and aerobic stability of sweet potato residue TMR silage  
D. Jiang, D. Niu, P. Tian, R. Li, F. Yang, C. Xu
- TU-45: Effects of moisture and *L. buchneri* on the conservation and ruminal degradability of high moisture corn and snaplage  
R.M. Santos, F.A. Jacovaci, T. Garcia-Diaz, K.C. Scheidt, C.C. Jobim, J.L.P. Daniel
- TU-46: Effects of processing, moisture and length of storage on the fermentative losses and ruminal degradability of reconstituted corn grain silage  
A.L.M. Gomes, J.L. Bueno, F.A. Jacovaci, D.C. Bolson, C.C. Jobim, J.L.P. Daniel
- TU-47: Effects of relocation and microbial inoculants on microbial population and aerobic stability of corn silage  
A.C. do Rêgo, R.C.A. Mendonça, M.S. Souza, R.I.R. Santos M. F.N. Domingues, C. Faturi, T.F. Bernardes, T.C. da Silva
- TU-48: Effects of stage of maturity, rollers and chopping length on starch availability, losses and aerobic stability of maize (*Zea mays* L.) silage  
J. Thaysen, H.-G. Gerighausen, C. Maack, W. Richardt, A. Ewen, K. Kellner, H.-P. Sierts
- TU-49: Estimation of ruminal gas production and utilisable crude protein at the duodenum from native, ensiled and ensiled + toasted peas and field beans  
M. Bachmann, C. Kuhnitzsch, S.D. Martens, M. Wensch-Dorendorf, O. Steinhöfel, A. Zeyner
- TU-50: Fermentation and nutritional quality of high moisture alfalfa leaf and stem silage  
M.C. Sikora, R.D. Hatfield, K.F. Kalscheur
- TU-51: Fermentation quality of mixed silage of corn stover, broccoli residues and apple pomace  
J. Wang, X. Yuan, A. Wen, T. Shao
- TU-52: Field survey on silo dimensions, silage characteristics, and its effect on temperature and density of grass silage in the Netherlands  
C. Sauzet, V. Demey, R. Ebbers, C. Koorn
- TU-53: Field-related quality management system for grass silage production  
J. Pickert, D. Brüning, G. Weise
- TU-54: Harvest window: comparison of whole crop rye and whole crop triticale in an early cut system  
Sz. Orosz, J. Kruppa, J. Kruppa Junior, D. Szemethy, E. Piszterné Fülöp, Z. Futó, R. Hoffmann

- TU-55: Identifying maize hybrids with optimal traits for snaplage  
J. Gusmão, L. Lima, M. Bastos, M. Cardoso, R. Binda, I. Carvalho, T.F. Bernardes
- TU-56: Impacts of feed-out speed, days after silo opening and surface density on spoilage of silage in the exposed face peripheral area of corn silage piles  
Y. Okatsu, N. Swanepoel, H. Gauthier, P.H. Robinson
- TU-57: Influence of plant population and maturity, microbial inoculation and ensiling time on fermentation profile, nitrogen fractions and starch digestibility in earlage  
L.F. Ferraretto, R.D. Shaver, J.G. Lauer, L.H. Brown, J.P. Kennicker, R.J. Schmidt, D.M. Taysom
- TU-58: Maize silage in South Africa: Composition, compaction, top layer losses and aerobic stability  
R. Meeske, R. Venter
- TU-59: Microbial inoculant, particle size, and storage time effects on crude protein content and concentration of ammonia nitrogen and soluble protein of reconstituted sorghum grain silage  
D.O. Sousa, M.A. Arcari, L.G. Nussio, L.J. Mari
- TU-60: Mixed silages of fodder beet and different feedstuffs: quality and nutritive value  
J. Latré, E. Dupon, E. Wambacq, J. De Boever, G. Haesaert
- TU-61: On-farm evaluation of maize silage: Is it possible to estimate dry matter and methane losses?  
S. Ohl, M. Leinker, E. Nacke, E. Hartung
- TU-62: Relationship among economic and nutritional parameters in flint and semi-dent corn silage  
J.L. Monge, F. Bargo, E. Giugge, G. Clemente, D. Combs, F. Clemente
- TU-63: Relationship between economic and nutritional variables in alfalfa silage  
E. Giugge, J.L. Monge, F. Bargo, G. Clemente, F. Clemente, D. Combs
- TU-64: Replacement of polyethylene film with Silostop oxygen barrier film on the nutritive value of corn silage for finishing beef cattle  
J. Machado, T. García-Díaz, K.C. Scheidt, M.P. Osmari, C. Banchemo, J.M. Wilkinson, C.C. Jobim, J.L.P. Daniel
- TU-65: Response to total mixed ration stabilizers depends on feed quality  
M. Rinne, M. Franco, K. Kuoppala, A. Seppälä, T. Jalava
- TU-66: Silage safety - Preventing serious injuries and fatalities  
K. Bolsen, R. Bolsen, P. Schmidt

- TU-67: Technologies applied to the production of corn silage in Brazilian capital of milk during nine years  
M.S. Dalle Carbonare, R.P. de Mello
- TU-68: The effect of processing of Virginia fanpetals (*Sida hermaphrodita* Rusby L.) biomass harvested at different dates on fermentation quality  
C. Purwin, M. Fijałkowska, Z. Nogalski, M. Starczewski, P. Żukowski, Z. Antoszkiewicz, J. Kaliniewicz
- TU-69: The practical use of a model to predict the wilting time of grass  
D. Brüning, J. Pickert, T. Hoffmann
- TU-70: The use of quebracho condensed tannins as additive for rehydrated corn grain silage: effects on fermentation pattern and aerobic stability  
A.V.I. Bueno, C.C. Jobim, J.L.P. Daniel, M. Gierus
- TU-71: Three-dimensional visualization of bulk density and oxygen-induced temperature distributions in silage using a stepwise-profiling penetrometer  
Q. Cheng, Y. Sun, W. Buescher, C. Maack, M. Li, H. Zhou, K.H. Jungbluth
- TU-72: Wet ensiling of sugar beets with or without ensiling additive  
M.R. Weisbjerg, U. Bedenk, A.L.F. Hellwing, M. Larsen, E. Hilscher

## Wednesday, 25 July 2018

### Emissions and Volatile Organic Compounds

- WE-73: Effect of wilting and *Lactobacillus buchneri* on the formation of volatile organic compounds in oat silage  
A.L.M. Gomes, D.C. Bolson, F.A. Jacovaci, L.G. Nussio, C.C. Jobim, J.L.P. Daniel
- WE-74: Formation of climate relevant gases during the ensiling process  
A.J. Schmithausen, K. Gerlach, M. Trimborn, K.-H. Südekum, W. Büscher
- WE-75: Nitrate degradation and gas formation in silages  
M. Knicky, F. Eide, B. Gertzell
- WE-76: Sugar beets with varying ensiling partners: losses and volatile organic compounds  
F. Kindermann, S.D. Martens, U. Bedenk, K. Weiß, A. Zeyner, O. Steinhöfel

### Silage Additives

- WE-77: Action of lactic acid bacteria used as silage inoculants on the digestive tract of ruminants  
M. Zopollatto, A.S. Neto, J.L.P. Daniel, L.G. Nussio
- WE-78: Additive type and composition affect fermentation pattern, yeast count, aerobic stability and formation of volatile organic compounds in whole-crop rye silage  
H. Auerbach, K. Weiss, P. Theobald
- WE-79: Additives with *Lactobacillus* spp. mix and cellulose enzymes affect the chemical quality and in situ ruminal degradability of whole –plant corn silage  
J.L. Monge, G. Clemente, J. Petri
- WE-80: Aerobic stability of crimped wheat grain manipulated by additive treatments detected using different methods  
M. Franco, T. Stefanski, T. Jalava, K. Kuoppala, A. Huuskonen, M. Rinne
- WE-81: An evaluation of monopropionine as chemical additive to improve aerobic stability of corn silage  
G. Borreani, F. Ferrero, E. Tabacco
- WE-82: Biological and chemical additives maintain nutritive value of grass silage during air exposure  
H. Auerbach, E. Nadeau



- WE-83: Carrot by-product fermentation quality and aerobic stability could be modified with silage additives  
M. Franco, T. Jalava, E. Järvenpää, M. Kahala, M. Rinne
- WE-84: Changes in the chemical composition of sugarcane silages treated with microbial and chemical additives  
T.C. da Silva, O.G. Pereira, L. Kung Jr., J.P.S. Roseira., F.X. Amaro, R.M. Martins, L.D. da Silva, K.G. Ribeiro
- WE-85: Combination of chemical additives or microbial inoculants affects aerobic stability of whole corn silage differently  
B.A.V. Arthur, D.O. Sousa, W.P. Santos, G.G.S. Salvati, G.H. Francetto, J.M. Silveira, M.A.O. Fioravanti, V.C. Gritti, K.S. Oliveira, L.G. Nussio
- WE-86: Effect of different additives and their interactions on alfalfa silage quality  
D. Li, K. Ni, Y. Zhang, Y. Lin, F. Yang
- WE-87: Effect of chemical additives on silage composition, aerobic stability and feed intake of maize silage depending on aerobic storage  
D. Brüning, K. Gerlach, K. Weiß, K.-H. Südekum
- WE-88: Effect of chemical additives, lactic acid bacteria and their combinations on the fermentation of low dry matter crops  
C. Kalzendorf, A. Milimonka
- WE-89: Effect of different inocula on aerobic stability of corn silage  
G. Borreani, F. Ferrero, M.Coppa, V. Demey, E. Tabacco
- WE-90: Effect of length of ensiling on fermentation characteristics, aerobic stability and structural microexamination of the grain in corn silages treated with bacterial inocula in a tropical climate  
A.A. Rodríguez, J. Suárez, P.F. Randel, L.C. Solórzano
- WE-91: Effect of microbial inoculant and fermentation period on the fermentation profile of silage of rehydrated corn and sorghum grains  
O.G. Pereira, J.O. Alves, F.E. Pimentel, S.D. Simão, J.P.S. Roseira, M.C.N. Agarussi, V.P. Silva, K.G. Ribeiro
- WE-92: Effect of microbial inoculant, particle size, and storage length on chemical composition and starch degradability of rehydrated sorghum grain silage  
D.O. Sousa, M.A. Arcari, L.G. Nussio, L.J. Mari
- WE-93: Effect of sealing strategies and sampling site on fermentation profile of corn silage  
K.S. Oliveira, J.P.P. Winckler, D.O. Sousa, V.C. Gritti, J.M. Silveira, W.P. Santos, J.L.P. Daniel, L.G. Nussio

- WE-94: Effect of silage additives on the fermentation and the protein quality of clover-grass mixture  
M. Gallo, L. Rajcakova, M. Polacikova, R. Mlynar
- WE-95: Effects of additive, herbage dry matter concentration and clostridia inoculation on fermentation quality of a red clover-grass silage  
W. König, E. König, K. Elo, A. Vanhatalo, S. Jaakkola
- WE-96: Effects of storage conditions and additive type on fermentation quality, aerobic stability and nutritional value of grass-clover silage  
H. Auerbach, E. Nadeau
- WE-97: Effects of storage time and silage additives on aerobic stability of maize silages  
K. Huenting, T. Aymanns, M. Pries
- WE-98: Effects of *Lactobacillus buchneri* PJB/1 alone and in combination with *Lactobacillus plantarum* MTD-1 on the bacterial community composition and aerobic stability of high moisture corn stored with or without air stress  
E.B. da Silva, S.A. Polukis, R.M. Savage, M.L. Smith, R.N. Mester, L. Kung Jr.
- WE-99: Effects of a chemical additive on the microbial community composition and aerobic stability of short-term ensiled corn silage  
E.B. da Silva, R.M. Savage, S.A. Polukis, M.L. Smith, R.N. Mester, L. Kung Jr.
- WE-100: Effects of a chemical additive on the microbial community composition, fermentation, and aerobic stability of corn silage stored with or without air stress  
E.B. da Silva, R.M. Savage, S.A. Polukis, M.L. Smith, R.N. Mester, L. Kung Jr.
- WE-101: Effects of a homolactic inoculant on fermentation and aerobic stability of alfalfa silage  
D.K. Combs, D.J. Undersander, R.J. Schmidt, R.C. Charley
- WE-102: Effects of a mixture of lactic acid bacteria containing *Lactobacillus diolivorans* on aerobic stability of grass silage after short time of storage  
J. Thaysen, E. Kramer
- WE-103: Effects of different formic acid/salt containing additives on stabilisation of TMRs  
G. Glenz, A. Milimonka, G. Römer, R. Beck, T. Ohlmann
- WE-104: Effects of four organic acids known as key intermediates in citric acid cycle on fermentation quality of lucerne silage  
W.C. Ke, D.M. Xu, P. Zhang, F.H. Li, M.N. Shah, X.S. Guo
- WE-105: Effects of intermediate storage and additive use on the formation of volatile organic compounds in sugar beet pulp silage pressed in plastic bags  
H. Auerbach, K. Weiss

- WE-106: Effects of lactic acid bacteria isolated from cow rumen fluid and feces on quality and *in vitro* digestibility of alfalfa silage  
L. Guo, D. Yao, D. Li, F. Yang
- WE-107: Effects of molasses and exogenous enzymes on the fermentation, aerobic stability and nutrient composition of ensiled maize cob and potato hash mixtures  
R.S. Thomas, C. Ncobela, R.J.G. Kgopong, K. Mphofu, P. Sebothoma, O.G Makgothi, B.D. Nkosi
- WE-108: Effects of sucrose and lactic acid bacteria inoculant on quality and characteristics of protein fractions of mulberry silage  
X.K. Wang, Y. Wang, Q. Zhang, X.J. Liu, F.Y. Yang
- WE-109: Effects of three strains of heterofermentative bacteria on the conservation of sugarcane silage  
A.L.M. Gomes, M.P. Osmari, J. Machado, A.C.O. Poppi, L.J. Mari, E. Chevaux, L.G. Nussio, C.C. Jobim, J.L.P. Daniel
- WE-110: Effects of viable lactic acid bacteria inoculants on perennial ryegrass silage fermentation and aerobic stability  
V. Vrotniakiene, J. Jatkauskas
- WE-111: Ensiling of crimped faba beans decreased selected antinutritional factors  
M. Rinne, K. Manni, K. Kuoppala, T. Niemi, E. Koivunen, M. Kahala, T. Jalava
- WE-112: Ensiling wet lucerne with biological or formic acid based silage additives  
A. Seppälä, S. Hoedtke, P. Wolf
- WE-113: Evaluation of silage additives and fermentation characteristics of maize forage using laboratory and field scale silo  
J. Jatkauskas, V. Vrotniakiene, K.L. Witt, N.G. Nielsen, R. Stoskus
- WE-114: Fermentation and aerobic stability of grass and grass-legume silages ensiled for 14 days  
G. Copani, N. Milora, K.A. Bryan, N.G. Nielsen, K.L. Witt
- WE-115: Fermentation profile and aerobic stability of sugar cane silage inoculated with *Lactobacillus buchneri* NCIMB 40788  
J. Peiretti, J.A. Navarro.
- WE-116: Fermentation quality and *in vitro* gas production of corn stover silage inoculated with or without *Lactobacillus plantarum* and *Enterococcus faecium*  
G. Guo, W. J. Huo, Q. Liu, C. Shen, Y.X. Wang, Q.F. Xu, S.L. Zhang
- WE-117: Fermentation suitability of Moso bamboo silage prepared with sake cake and lactic acid bacteria  
H. Kikukawa, Y. Cai

- WE-118: First estimation and validation of a new model to predict dry matter loss based on temperature changes – II. Validation of maize mini silo and big scale silage  
K.L. Witt, J.N. Joergensen, N.G. Nielsen, K.A. Bryan, G. Copani, S. Pires, V. Vrotniakiene, J. Jatkauskas
- WE-119: First estimation and validation of a new model to predict dry matter loss based on temperature changes – III. Validation of model in a crop with low ensilability  
K.L. Witt, J.N. Joergensen, N.G. Nielsen, K.A. Bryan, G. Copani, S. Pires, V. Vrotniakiene, J. Jatkauskas
- WE-120: First estimation and validation of a new model to predict dry matter loss based on temperature changes – IV. Validation of model in a short fermentation regime  
K.L. Witt, J.N. Joergensen, N.G. Nielsen, K.A. Bryan, G. Copani, S. Pires, V. Vrotniakiene, J. Jatkauskas
- WE-121: Grass silage fermentation characteristics and aerobic stability as affected by type of silage additive  
E. Nadeau, J. Jakobsson, H. Auerbach
- WE-122: Growth of lactic acid bacteria in the presence of various tannins  
U. Korn, B. Pieper
- WE-123: Identification of lactic acid bacteria isolated from mulberry (*Morus alba* L.) to improve tannin degradation and silage quality  
Y.C. Zhang, D.X. Li, X.K. Wang, Y.L. Lin, F.Y. Yang
- WE-124: Impact of various silage additives on propylene glycol content of grass silages  
N. Lau, M. Huenerberg, E. Kramer, J. Hummel
- WE-125: Influence of chemical pesticides on the survival of lactic acid bacteria in silage inoculants  
A.C.O. Poppi, M.P. Osmari, G. Lazzari, E.C. Poppi, L.J. Mari, C.C. Jobim, J.L.P. Daniel
- WE-126: Inoculant effects on mycotoxins, fermentation characteristics, and nutritive value of bermudagrass silage  
J.M.B. Vendramini, J.C.B. Dubeux Jr., L.E. Sollenberger, F. Leite de Oliveira, F. Kuhawara, U. Cecato, C. V. Soares Filho, J.M.D. Sanchez, J.K. Yarborough
- WE-127: *Lactobacillus hilgardii* as inoculant for corn silage in Italy  
F. Ferrero, E. Tabacco, S. Piano, V. Demey, G. Borreani
- WE-128: *Lactobacillus plantarum* TAK 59 as a silage additive to improve the silage quality  
A. Olt, E. Songisepp, M. Ots
- WE-129: Long or short shredded corn silage with additives - differences in fermentation quality parameters  
A. Jilg

- WE-130: Silage fermentation of sugarcane plants prepared in Mozambique  
Y. Cai, S. Yamasaki, D. Nguluve, B. Tinga, A. Fumo, T. Oya
- WE-131: Sugar-rich grass: effect of two inoculants on silage fermentation characteristics and nutritional value  
E. Wambacq, J.P. Latré, P. Vermeir, G. Haesaert
- WE-132: Temperature track and spoilage microbes affected by different additives in wet hay  
G. Römer, G. Glenz, A. Milimonka
- WE-133: The aerobic stability of avocado (*Persia Americana*) pulp silage treated with microbial additives  
B.D. Nkosi, R.S. Thomas, T. Langa, M.M. Seshoka, R. Meeske, J. van Niekerk
- WE-134: The effect of *Lactobacillus buchneri* and *Pediococcus acidilactici* inoculants on pH and microbial population of wilted alfalfa silage  
M. Rezaeian, N. Nafarih
- WE-135: The effect of adding fibrolytic enzymes and lactic acid bacteria on fermentation quality and *in vitro* digestibility of napier grass silage  
S. Bureenok, S. Langsoumechai, N. Pitiwittayakul, C. Yuangklang, K. Vasupen, B. Saenmahayak
- WE-136: The effect of cellulase and/or *Lactobacillus plantarum* on fermentation quality of napier grass silage  
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- WE-138: The effect of inoculation on fermentation characteristics and nutritional value of grass silage at farm scale  
C. Sauzet, V. Demey, R. Ebbers, C. Koorn
- WE-139: The effect of two heterofermentative bacteria (*L. hilgardii* CNCM I-4785 and *L. buchneri* NCIMB 40788) and their combination on fermentation and aerobic stability of corn silage at different opening times  
J.P. Szucs, A. Suli, V. Demey
- WE-140: The effects of inoculation of grass with either homo-fermentative or heterofermentative lactic acid bacteria on silage quality, diurnal variation in rumen pH, lactic and volatile fatty acids  
A. King, D.R. Davies, J.A. Huntington
- WE-141: Use of straw like absorbent to ensiling lettuce and broccoli by-products  
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- TH-143: Ensiling features of thistle (*Cynara cardunculus* L.) to be used for biogas production  
F. Ferrero, E. Tabacco, G. Borreani
- TH-144: Impact of cultivar, maturity stage and storage period on fermentation quality of wet sorghum seeds  
R. Resch, M. Schweiger, R. Schmied
- TH-145: Roughage based liquid diets for pregnant sows – Harvest, post-shredding and feeding management of whole-plant silages (wheat and maize)  
P. Ebertz, A. J. Schmithausen, S. Schulz, C. Visscher, J. Kamphues, R. Hölscher, W. Büscher
- TH-146: Roughage based liquid diets for pregnant sows? Apparent digestibility and nutritive value of whole plant silages (wheat and maize)  
S. Schulz, C. Visscher, P. Ebertz, W. Büscher, R. Hölscher, J. Kamphues

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- TH-147: A survey of silage hygiene on Wisconsin dairy farms  
M. Western, P. Hoffman, M. Windle
- TH-148: Aerobic spoilage of grass silage: *Listeria* and forage quality  
J. McFadzean, K. Le Cocq, D.R. Davies, B. Brown, M. van der Giezen, C.J. Hodgson, M.R.F. Lee, J.A.J. Dungait
- TH-149: An attempt to study suppression of feruloyl esterase activity in *Lactobacillus ultunensis* by presence of sugars  
K. Mogodiniyai Kasmaei, D. Schlosser, H. Sträuber, S. Kleinsteuber
- TH-150: Can *Fasciola hepatica* metacercariae survive ensiling and retain their viability?  
B.C. John, D.R. Davies, D.J.L. Williams, J. Hodgkinson
- TH-151: Characterisation of different yeast species from corn silage and their ability to degrade lactate  
J. Zielke, B. Pieper

- TH-152: Characterization of the microbial community in lucerne silages differing in fermentation quality  
K. Kube, T. Hartinger, N. Gresner, K.-H. Südekum
- TH-153: Effect of sealing strategies and sampling site on microbial communities of corn silage  
V.C. Gritti, J.P.P. Winckler, B.A.V. Arthur, J.M. Silveira, G.G.S. Salvati, W.P. Santos, K.S. Oliveira, D.O. Sousa, J.L.P. Daniel, L.G. Nussio
- TH-154: Identification of lactic acid bacteria isolated from *Stipa grandis* silage and native grass silage in Eurasian steppe  
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- TH-155: Impact of inoculation with *Lactobacillus buchneri* and *Lactobacillus hilgardii* on bacterial and fungal communities during feed-out period of corn silage  
P. Drouin, F. Chaucheyras
- TH-156: Impact of plant biostimulants on maize forage and subsequent silage quality: A field experiment using mini-silos  
A. Christou, C. Hodgson, T. Cogan, M. Gaffney, K. Le Cocq, D.R. Davies, M.R.F. Lee
- TH-157: Influence of storage period on the quality of a maize silage  
U. Wyss
- TH-158: *In vitro* fermentation profiles of *Clostridia* at different ensiling pH  
P. Drouin, N. Thorgreen
- TH-159: *In vitro* screening of technical lignins for their antifungal activity against three molds and one yeast isolated from spoiled forage  
D.C. Reyes, S.L. Annis, S.A. Rivera, D.S. Argyropoulos, J.J. Perry, C. Wu, S. Alparslan, D. Gomez, D. DePippo, M.S. Castillo, J.J. Romero
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E. Wambacq, K. Audenaert, M. Höfte, S. De Saeger, G. Haesaert
- TH-161: Isolation and identification of lactic acid bacteria from fermented juice of tropical crops in Thailand  
N. Pitiwittayakul, S. Bureenok
- TH-162: Isolation and identification of lactic acid bacteria in sorghum silage  
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E. Tabacco, D.M. Nucera, S. Piano, G. Borreani

- TH-164: Selection of heterofermentative lactic acid bacteria in sugarcane silages  
R.A. de Paula, O.G. Pereira, T.C. da Silva, K.G. Ribeiro, H. C. Mantovani, L. Kung Jr.
- TH-165: Silage additives suppress fungal growth and mycotoxin formation in whole-crop rye silage exposed to air  
H. Auerbach, P. Theobald
- TH-166: The use of *Lactobacillus diolivorans* as silage inoculant  
H. Schein, M. Hirz, M. Buchebner, W. Kramer
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S. Xu, L. Duniere, W. Addah, B. Smiley, W. Rutherford, S. Qi, Y. Wang, T.A. McAllister

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- TH-169: Corn silage (native vs. hybrid varieties) as forage to evaluate potential milk yield production in Mexico  
M. Rosas Davila, L.E. Robles Jimenez, R. Montes de Oca, J. Osorio Avalos, A.J. Chay Canul, M. Gonzalez Ronquillo
- TH-170: Digestion kinetics of neutral detergent fibre fraction of corn silages determined from *in vitro* gas production  
P.R. Score, E. Margaria, Y. Sun, G.F. Schroeder, A. Zontini, M.A. Messman, J.R. Knapp, W. Hu
- TH-171: Effect of differently conserved herbage on chemical composition of forages and nitrogen turnover in dairy cows  
U. Wyss, C. Böttger, F. Dohme-Meier, K.-H. Südekum
- TH-172: Effect of dry matter concentration and a chemical silage additive on fermentation quality of ensiled sugar beet pulp and preference shown by goats  
K. Gerlach, L. Kampeter, M. Eklund, K.-H. Südekum
- TH-173: Effect of maize hybrid and year on chemical composition and digestibility of nutrients  
R. Loučka, V. Jambor, Y. Tyrolová, F. Jančík, P. Kubelková, A. Výborná, P. Homolka
- TH-174: Effect of maize hybrids differing by maturity and endosperm type on digestibility of silage  
R. Loučka, V. Jambor, P. Homolka, Y. Tyrolová, F. Jančík, V. Koukolová, P. Kubelková, A. Výborná



- TH-175: Effects of plant species and ensiling conditions on the formation of biogenic amines in silage and the preference behaviour of ruminants  
R. Scherer, K. Gerlach, J. Taubert, S. Adolph, K. Weiß, K.-H. Südekum
- TH-176: Effects of plant species, ensiling conditions and storage duration on chemical composition and protein quality of lucerne and red clover silage  
R. Scherer, K. Gerlach, K. Weiß, K.-H. Südekum
- TH-177: Effects of two various chopping lengths and crop processing conditions of maize silage on silage quality, nutrient digestibility and performance of high yielding dairy cows  
D. Kampf, L. Prokop, J. Thaysen, K. Kellner, E. Boll
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P. Dele, B. Akinyemi, O. Okukenu, T. Amole, O. Sowande, A. Jolaosho, O. Arigbede, J. Olanite
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F.A. Jacovaci, D.C. Bolson, V.C. Gritti, K.C. Sheidt, B.S. Campos, J.L.P. Daniel, C.C. Jobim
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- TH-181: *In vitro* ruminal fermentation of lucerne silages differing in nitrogen fractions and fermentation quality  
T. Hartinger, N. Gresner, K.-H. Südekum
- TH-182: Kinetics parameters of different purpose sorghum silages at second crop  
A. Behling Neto, R.H.P. Reis, A.P.S. Carvalho, J.G. Abreu, L.S. Cabral, D.P. Sousa
- TH-183: Profile of chemical quality of corn silage in the Brazilian milk capital  
R.P. de Mello, M.S. Dalle Carbonare
- TH-184: Relationship between length of cut and mean particle length in whole-plant corn silage at two types of forage harvesters  
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L. Comino, A. Revello Chion, A. Zappino, E. Tabacco, G. Borreani
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B. Beeger, W. Junge, U. Bedenk, E. Stamer, L. Andersen
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J. Winkelmann, M. Kurzbuch, E. Kramer
- TH-195: Virginia fanpetals (*Sida hermaphrodita* Rusby L.) silage can be fed to young bulls  
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