

Key Word Index

The key word index is created directly and automatically from the submitted abstracts. Efforts have been made to make this index consistent; however, error from author entry contributes to inaccuracies. Abstract numbers preceded by M are Monday posters, numbers preceded by T are Tuesday posters, numbers preceded by W are Wednesday posters; all other numbers indicate oral abstracts.

- A**
AA digestibility, 390
abdominal and tail fat, M405
abortion, T228, 276
absorption, 99
Acacia mangium, M121
academia, 240
academics, 347
accelerated growth, 151
accelerometer, M10, M11, M163
acclimation to handling, 545
accuracy, 595
accuracy of prediction, 38
ACE-inhibitory activity, W66
ACE-inhibitory peptides, W66
acetate, M309
acetyl bromide lignin, 217
acetylsalicylic acid, 272
acid detergent fiber, M133
acid hydrolysis, 449
acid stress, T89
acid-heat treatment, T371
acidified, 295
acidity, T362
acidosis, T327, T361, W313, W341, W395, 156, 557, 567
acidosis resistance, 563
Actigen, M301, T410, T413
activity, W280
acute phase response, 737
acute toxicity, W190
acute-phase, W10
acute-phase proteins, T13
acute-phase response, 520
adaptation, W284
additive, M295, M386, T187, W96, W99, 51, 414, 764
adenosine monophosphate-activated protein kinase α , W126
ADG, M307
adipocyte, W126, W127, W250, 244, 245, 246
adipocyte size, W218
adipogenesis, 840
adipogenic gene, W130
adiponectin, T224
adipose, T343
adipose tissue, T224, W237, 77, 249, 752
adipose tissue proteome, T49
adiposity, T38
adjustment factor, M72
adsorbent, 289
aerobic deterioration, 49
aerobic stability, T360, W105
aflatoxin, W21, W243, 760
aflatoxin B1, T100
aflatoxin M1, M340
AG*IDEA, 806
age, W32
age at first calving, W30
age of dam, W40
aggression, M26, 178
agricultural workers, 354
agriculture issues, T420
agroforestry, T140, W110
agro-industrial by-product, 441
AI, M166
AIC, W157
Alabama, M114
Albizia lebbbeck, W92
albusin B, T177
alcohol, W343
alcoholic fermentation, W114
alfalfa, M123, M135, M139, T120, W94, W103, W152, W371, W416, 215, 849
alfalfa hay, T302, W334, W348, 302
alfalfa silage, M315, W108
algae, M373, 754, 758
alkane, W265
allometric, M178
Alloxan-induced diabetic rats, 594
alpaca, M107
alternative anthelmintics, T394
alternative feedstuffs, M222, 93, 389
alternative forages, T290
amino acid, M193, M338, T179, T182, T183, T184, T185, T202, T373, W140, W141, W221, W320, W338, 6, 389, 393, 872
amino acid availability, W310
amino acid supplement, W310
amino acid transporter, T183
amino acid utilization, 666
 γ -aminobutyric acid, T77
Amino-Gut, 384
ammonia, W100, W107, W270, W276, 848, 851, 853
ammonia and nitrogen, 121
amniotic fluid, 176
Amomum subulatum, 19
amylase, T300, 145
anabolic implant, 521
anaerobic digestion, 114
analgesia, 311
analgesia and anesthesia, 313
analgesic, M24
analysis, 197
anatomy, T422
ANGPTL4, 777
animal agriculture, 465
animal breeding, T425
animal byproducts, W151
animal feeding, T199
animal health, 17
animal model, T158, W44
animal performance, M364
animal science, T426, 354, 803, 887, 888, 893
animal waste, 646
animal welfare, M2, 11, 180, 453, 467, 507
animal well-being, 504
anion, T114
annatto, M144, 201
anovulation, 815
antedependence, 33
anthelmintic, T396, 19
anthocyanidin-accumulating alfalfa, M116
antibacterial, T89, T110, 828
antibacterial activity, 590
antibiotic, M291, T277, T278, 15, 468
antibiotic free, T414, T266
antibiotic replacement, 762
antibiotic resistance, 773
antibiotic-free Yorkshire, T265
antibiotic-resistant bacteria, 154
antibody, 699
anti-inflammatory, M364, 516
antimicrobial, M100, T115
antimicrobial activity, 361
antimicrobial growth promoter, 516
antimicrobial mechanism, 361
antimicrobial residues, W158
antimicrobial resistance, 360
antimicrobial substance, T103
antimicrobial usage, M172
anti-nutritional factors, M121, M128
antioxidant, M168, T294, T365, 288
antioxidant activity, W312
antioxidant capacity, W357
antioxidant status, T333
antioxidants, W86, 143
anti-oxidative status, T365
antisecretory factor, 813
antral follicle counts, M241
apoptosis, W218, W243, 192, 635
apparent ileal digestibility, T186
appearance, W89
appetite, M180
apple pomace, W390
aquaculture, T24
aqueous extracts, T251
area under curve, M384
L-arginine, M245

arginine, 287, 394
 aroma, M92, W89
 aromatherapy, T160
 arterio-venous concentration difference, 373
 artificial insemination, M236
 Aseel, M78, T50
 assay, T12
 assessment, T423
 association analysis, 340
 association test, T159
 associative genetic effect, 476
 ATP bioluminescence, T73
 attendance, T424
 attitudes, 507
 auctions, 324
 automatic milking, T139, W272, 307
 automatic milking system, 110
 available nitrogen, M118
Avena sativa, M132
 average daily gain, M104, M406, M408, T275, T285
AVMA Guidelines on Euthanasia, 8
 Awassi, M405
 Ayrshire, M68

B
 B2M, T347
Bacillus subtilis natto, T332, T344
Bacillus subtilis natto fermentation production, T348, T350
 backgrounding, 118
 bacteria, M34, W321, W376, 853
 bacterial analysis, 234
 bacterial colony, 722
 bacterial counts, 783, 784
 bacterial growth, M376
 bacterial interactions, T108
 bacteriophages, 154
 bait strips, 782
 balance of N, W288
 baleage, 875, 877
 bamboo charcoal, T100
 banana flour, M223
 barley, T195, T293, T308, 561, 569
 barley grain, M346, M349, M355, M407, W6, W329, W365
 barometric pressure, 325
 batch culture, M378
 Bayesian analysis, 477
 Bayesian inference, 33, 341
 Bayesian Lasso, W58
 BCS, M264, M265
 bedding material, 628
 bee pollen, T415, W327
 beef, M58, M178, T33, T170, W35, W128, W163, W164, W166, W167, 28, 413, 466, 481, 524, 526
 beef bulls, M261
 beef calves, M16, 324
 beef cattle, M10, M11, M14, M56, M129, M184, M241, M252, M291, M303, M305, M306, M308, T13, T21, T31, T36, T275, T280, T286, W30, W31, W33, W34, W36, W38, W40, W41, W44, W55, W56, W168, W171, W174, W176, W216, W253, W259, W260, W261, W285, W288, W291, W293, 26, 27, 34, 321, 338, 460, 508, 509, 535, 548, 549, 550, 557, 559, 562, 691, 694, 796, 848, 851, 852, 861, 863, 891
 beef cattle feedlot, W254
 beef cattle nutrition, 695
 beef color, T294, W179
 beef cow, M179, T276, W24, 263, 265, 266, 267, 270, 271, 272, 291, 320, 546, 553
 beef cow performance, T272
 beef heifer, M246, M297, T215, T232, T283, W263, W331, W332, 327, 533, 770
 beef quality, W182, 527
 beef steers, T281, 339
 behavior, M3, M4, M5, M7, M10, M11, M15, W200, W413, 175, 235, 305, 306, 454, 462, 649
 behavioral pattern, 307
 benchmarking, M109, M175, 229, 274
 bermudagrass, T141, W122, 48, 58
 bermudagrass nutritive value, T117
 best management practices, M160
 best practices, 803
 beta arrestin, 774
 beta-adrenergic agonist, M218
 beta-agonists, 555
 beta-catenin, M250
 beta-glucan, W234
 bias, 29
 bifidobacteria, T55, 69
Bifidobacterium, 501
 bioactive, 381
 bioavailability, W268
 biodiesel, M292, M345, M348, T287, W181, 758
 bioenergetics, W224
 bioethanol co-products, T376
 bioethics, 465
 biofilm, T82, 499
 biofuel, W378, 754
 biofuel production, 114
 biohydrogenation, M374, M385, 146
 bioluminescence imaging, T206
 biophotonic, 700
 biopsy, M174
 biosecurity, 453, 617, 618
 BioStabil Plus, W95
 biostimulatory effects, M252
 biplot analysis, 39
 birdsfoot trefoil, W387, 849
 birth weight, 478
 bismuth subsalicylate, 290
 bleaching, M142, M143, M144, M145, M146, 67, 68
 blood, M348, M423, W136
 blood components, T174
 blood enzymes, M419
 blood flow, M16, T161, 272, 287
 blood meal, T358, W386
 blood metabolites, W8, 571, 881
 blood metabolites and metabolic diseases, W9
 blood parameters, M418
 blood profile, M215
 blood serum, M397
 blood urea, T21
 blood-based pregnancy detection, M62, M63
 blue cheese, M94
 bm3, T341
 BMPR-IB gene, T51
 BMR, 216
 BMR corn silage, 82
 boar, 450
 boar taint, W238
 body characteristics, M405
 body composition, W196
 body condition, M179
 body condition score, T298, T403, W264, 250, 457, 625, 710, 711
 body fat, M183, W132
 body shape, 457
 body temperature, 459, 557
 body water, M183
 body weight, M81, M82, 510
 body weight EPD accuracy, W46
 Boer, M114
 bone markers, M329
 bone marrow mesenchymal stem cell, 740
 bone mineral content, W207
 bone strength, W207
Bos indicus, T34, W41, W162, W170, W173, W174, 122, 264, 774
Bos taurus heifers, 545
 bovine, M131, M197, M257, T12, T30, T374, W2, W10, W130, W258, 246, 544, 652, 869
 bovine α S1-casein, 368
 bovine adipocyte, T230
 bovine endometrial cells, W245
 bovine estrous cycle, 106
 bovine in vitro fertilization, M177
 bovine lactoferrin, 141
 bovine leukosis, M32
 bovine mammary epithelial cells, T94
 bovine mammary gland, 371, 374
 bovine mammary involution, 834
 bovine myeloperoxidase, T1, 16
 bovine respiratory disease, 336, 517
 bovine tuberculosis, M48
 bovine viral diarrhea virus, T9, 13
Brachiaria, T357
Brachiaria sp. 'Mulato', T128, T131
 Brahman, T229
 brain aging, 489
 brain lesion, 181
 brain stem, M257
 Brazilian Southwestern Amazon, W20

BRD, T20, W26
breast cancer, 141
breed, W86, W178, 458, 662, 858
breeding, M67, 513
breeding for health, W11
breeding season, W421
breeds, 597, 598
brewer grains, W404
Brody function, M185
broiler, M80, M206, M212, T16, T175,
T176, T180, W134, 760
broiler chickens, T49, 388
broiler litter, M401
broiler performance, 593
bromatological composition, T192
broodmares, 625
broom sorghum, T309, T310
broomcorn, T308, T312
browning, M90
browse, 20
browse species, W118
Bruna dels Pirineus, W23
BSE, 17
bST, T298, W150
Bt maize, 446, 447
bucks, W421
buffalo, M76, T41, W47
buffer, 111
bulk milk, 238
bulk tank, 364
bulk tank milk, 363
bull, M251, T208, W303
bull exposure, M252
bull-calves, W294, W295
bunk space, T320
butyrate, M167, W379, 159
Butyrivibrio fibrisolvens, M380
BVD, 699
B-vitamin, T329
by-product, M292, W121, W181, W320,
W374, 124, 676
by-product feeds, 145

C
Caatinga, M128, 437
cactus, W101, W153, W415
CAFO regulation, 643
Calan, M1
calcitonin, 773
calcium, 95, 206
calcium hydroxide, W114
calcium propionate, M253, M399
calcium sulfate, W201
calf, M46, M59, M164, M168, M187, M192,
M273, M284, M334, M371, T255, T273,
T292, T304, T346, W13, W16, W37,
W137, W140, W197, W266, W311,
W317, W327, W328, W340, W349,
W351, 85, 127, 163, 169, 262, 277, 295,
296, 297, 301, 413, 464, 554, 736, 737,
814, 817, 818, 853
calf chewing, W335
calf diarrhea, 813
calf health and survival, 474
calf nutrition, 303
calf performance, M285, W255
calf removal, 263
calf rennet, W61
calf starter, W346, W347, 630
calf welfare, M175
calthood disease, W15
California Mastitis Test, 167
calpain, W155, 634
 μ -calpain autolysis, W159
calves milk replacer, M323
calving, 325
calving ease, M66
calving hygiene, 811
calving intervals, M61
calving management, 506, 810
calving season, W262
Camelina sativa, M320
Camellia sinensis, 854
Camellia extracts, T10
Campylobacter, T107
Canadian Holstein, 474
cancer, 375
Candida valida, W106, 146
cane molasses, M382
canine, T65, 488, 491, 763, 767
canine cognition, 489
canola meal, 128, 421
canola straw, W112, W125
canopy light interception, T128, T131
capillary electrophoresis, M150, M152
caprine, W223
caprine milk, W83
caprylic acid, M213, W13
capsule, T162
carbohydrates, T191, 578
carbon dioxide, M86
carbon footprint, 852
carcass, M424, T170, T282, W43, W171,
W254, W406, 24, 584, 747
carcass and meat quality, T190, 387
carcass attributes, W168
carcass characteristics, M211, M412, W125,
W408, 690
carcass composition, T19, W410, 442
carcass dressing, M406
carcass leanness, M218
carcass merit, W56, 517
carcass quality, M306
carcass quality and fatty acid profile, T417
carcass traits, T146, W297, W405
carcass yield, M391, M408, W407
carcass-characteristics, W295
cardiovascular, T59
career, T158, 347, 350
caretaker, 451
carotenoids, W70
carry over, 675
cartilage, 179
case study, 511
 β -casein, 202
casein, M199, 825
casein bioactive, 379
casein concentrate, 203
casein glycomacropeptide, W186, W193
casein micelles, 62
casein structure, 379
caseinomacropeptide, T89
cash flow, 511
Caspase 3, W243
CAST, T35
castration, M24, M25, W26, 14, 313, 526
cathelicidin, 587
cathelicidin peptides, 590
cattle, M12, M18, M44, M48, M185, M228,
M247, M287, M289, M290, T5, T11,
T14, T19, T117, T136, T143, T214, T274,
T421, W28, W39, W142, W165, W166,
W222, W225, W241, W246, W247,
W248, W249, W305, W306, 18, 58, 59,
72, 117, 126, 292, 323, 399, 416, 528,
537, 538, 540, 556, 772, 777
cattle euthanasia, 12
cattle feces, 359
cattle growth, 517
cattle tick, W20
causal relationships, 484
cayenne pepper, T396
CD10, 369, 370
CD4 CD8, 684
C/EBP α , 742
cell efficiency, T263
cell envelope proteinase, 723
cell lineage, 1
cell proliferation, W218, 744
cell turnover, T230
cellulase, T331
cellulolytic species, M390
cellulosic ethanol, W378
ceramic membrane, 65
cereal, 433
cereal grains, T191
cervicitis, 816
cervix, T226
CFP, T69
chambers, M170
charcoal, W349
charcoal extracted, W242
Cheddar, W72, 61, 601
Cheddar cheese, M147, M148, 60, 500, 602,
605, 721, 726
cheese, M98, M102, T108, T110, T407,
W63, W64, W65, W67, W70, W81, 362,
496, 499
cheese ripening, 722
cheese whey, M96
cheese whey lactose, M149
cheesecloth, T120
chelated mineral, W206

chelated trace mineral, W212, W213
 chemical, W113
 chemical composition, M121, M135, M141, T119, T406, W372, 224, 566
 chemical distribution, M124
 chemiluminescence, W2
 chemotaxis, 664
 chewing, M155
 χ^2 test, W194
 chick, T186, W187
 chicken, M81, M83, T15, T53, T54, 252
 CHIEF, 211
 chitosan, T286, 66
 chitotriosidase, T393
 cholesterol, M421
 cholesterol removal, W71, W82
 chromium, W267, W303, 414, 539
 chromium acetate, W126
 chromium propionate, T279, 248, 419, 420, 794
 chymosin, W61
 CIDR, M232, M260, T232, W215, 266, 267
 cinnamaldehyde, M377, T15, W380
 circadian, M198, 90, 830
 circadian clock, 88
 circadian rhythms, 89
 citrate, 162
 CLA, M177, M195, T217, T230, T267, T316, W225, 132, 147, 558
 claw angle, 108
 claw horn disease, 706
 claw length, 108
 claw lesions, 153
 clearance rate, M384
 CLFS, W160
 clinoptilolite, M417
 clock gene expression, W240
 close-up, M358
 CNCPS, M119, W123, W339
 CO₂, M90
 coagulation, 731
 coat color, M107, 687
 coccidiosis, W187
 coenzyme Q10, M93
 co-fermented wheat and corn DDGS, M200, 637
 collaboration, 806
 collagen, 750
 colon cancer, T92
 color, 481
 colostrum, M46, M180, M367, T254, W14, W18, W142, W351, 76, 149, 277, 427
 colostrum replacers, 149
 colostrum storage, T351
 commercial cuts, W173, W410
 communication, 44
 companion animal, 342, 343, 344, 345, 347, 487, 490, 890
 comparative proteome, 823
 comparative slaughter, M415, M416, 437
 comparison, M176
 competition, M6
 competitive grants, 41
 compliance, 280
 composite gels, M99
 composite reproductive traits, W49
 composition, 251
 compositional endpoints, 861
 compost, 592
 compost bedded pack barn, M112, 234
 computation, 197
 computer software, M115
 computing methods, 31, 199
 concentrate, M332, 134, 668
 concentrate levels, T317
 concentrate supplementation, M71
 concentrate type, 855
 concentrated, W173
 conception rate, M65, M244, M276, 269
 condensed tannin, M119, M299, M300, M395, T384, T401, W399
 conditioning, 259
 confinement, M15
 confocal microscopy, M99, 733, 826
 conjugated linoleic acid, M374, T301, W177, W355, 570
 consumer, 9, 142
 consumer trust, 801
 contemporary group, W39
 contemporary issues, 356, 619
 content appraisal system, 514
 continuous culture, T375, W287, 158, 570
 control, W20
 cooling systems, 309
 cool-season grass, W120
 copper, W205, W208, W209, W298, 98, 99, 418
 co-product, M373, M345, T287, 566, 865
 co-products from bioethanol processing, T377
 coriander, M380
 corn, W393, 125, 842, 862
 corn bran, M136
 corn co-products, 390
 corn crop residues, 683
 corn germ meal, 448
 corn gluten feed, 428
 corn grain, T329
 corn grain processing, M312
 corn processing, T325, 115, 116
 corn silage, T122, T123, T171, T262, T326, T337, T360, W98, W111, W348, 49, 165, 422
 corn silage inoculation, W356
 corn stover, T281
 corpus luteum, T217, 543
 correlation, T44, 480
 cortisol, 401, 455, 461, 462, 464
 cost analysis, M38
 Cosynch, M156
 cotton, 865
 cottonseed by-products, M140
 cottonseed meal, T263
Coturnix coturnix japonica, W206
 country, 35
 course curriculum, 895
 course duration, T427
 course grades, T424
 course integration, 890
 courtship, M19
 covariance components, W49
 cow, M30, M162, M355, T145, T147, T216, T345, W345, 28, 101, 105, 289, 771, 865
 cow behavior, 310
 cow comfort, 315
 cow evaluation, 37
 cow milk, T168, W144, 685
 cow mortality, 709
 cow performance, 54
 cow size, 510
Coxiella burnetii, 363
 cracked corn, 756
 cream, W78
 cream cheese, W82
 creatine kinase, M57, T23
 creep feed, W199, W200, 384
 Creole cattle cow, M253
 CRH, W10
 Crohn's disease, M52
 crossbred, M266, T265, T266, W59, 478
 crossbred cows, M268
 crossbreed, M68
 crossbreeding, M284, W29, 472, 480, 661
 cross-breeding, W27
 crossed hair sheep, W407
 crosslinked β -cyclodextrin, W78
 cross-ventilated barn, W281, 785
 crown rust resistance, M132
 crude glycerin, M412
 crude glycerol, 125
 crude protein, M406, M408
 cryopreservation, T162, T163, T270, 450
 cryptic splicing site, 730
 crystallization, M88
 CTX and OC, M329
 Cull pinto bean, M422
 culling, M69, M366
 cultures, 609
 cumulative gas production, M122, M140
 curd, 727
 cutting height, T171
 cutting time, W62
 CV, 239
 cyanocobalamin, 653
Cynodon, T142
Cynodon dactylon, T68
 cyst, M227
 cystic follicles, 233
 cytochrome p450, M255
 cytokine, M255, 13, 846

- D**
- daily prediction, M73
- dairy, M6, M38, M45, M159, M271, M331, M350, M357, T169, T247, T312, T372, W91, W275, W276, W320, W350, W359, 101, 163, 278, 279, 305, 306, 312, 348, 409, 452, 519, 712, 786, 793
- dairy breeds, W358
- dairy calf, M13, M39, M313, M325, T325, T332, W18, 86, 149, 168, 273, 294, 298, 299, 314, 397
- dairy camel, 355
- dairy cattle, M40, M319, T239, T256, T297, T299, T315, T338, 35, 39, 188, 275, 673, 703, 705, 706, 780
- dairy cattle behavior, 74
- dairy cattle economics, 505
- dairy cattle fertility, M166
- dairy cow, M2, M4, M31, M35, M43, M65, M106, M157, M171, M173, M232, M235, M236, M243, M259, M260, M263, M264, M265, M267, M270, M275, M276, M318, M336, M347, M362, M372, T167, T209, T233, T234, T238, T244, T246, T249, T259, T261, T303, T316, T326, T329, T333, T334, T337, T347, T348, T349, T350, T368, W1, W17, W146, W149, W231, W251, W314, W324, W329, W337, W338, W344, W388, 4, 6, 7, 79, 80, 81, 103, 104, 107, 128, 133, 136, 166, 280, 281, 308, 432, 459, 469, 573, 666, 704, 815, 819, 830, 833, 835, 836, 876, 881
- dairy farm, M172, W273, 782
- dairy feces, 113
- dairy goat, M403, M404, M413, T385
- dairy heifer, T340, W232, 52, 875, 877
- dairy management, M111
- dairy manure, W279
- dairy microbiology, T74
- dairy nutrition, M274
- dairy powders, M91
- dairy processing, 493
- dairy producer, 171
- dairy product, M321, 382
- dairy product demand, 142
- dairy product innovation, 143
- dairy quality assurance, 504
- dairy survey, M160
- dairy systems, W272
- data structures, 198
- days dry, M66
- days of gestation, W358
- days of pregnancy, M339
- days open, T257
- DDEF1, T33
- DDGS, M202, M294, M379, W331, W332, W365, 639, 640, 641, 642, 770
- DDGS fermentation, M201
- de novo synthesis, 135
- degradability, M158, T353, T355, 84
- degradable protein, W353
- degradation, M383, T309, T379, W367
- degraded pasture, W110
- dehorning, 313
- delivery system, M53
- denaturing gradient gel by electrophoresis, M330
- dendritic cells, M50
- dense matrix inversion, 31
- density, T262, W98
- desaturase, W345
- desaturase index, M321
- Deslorelin, T164
- desolvation, 822
- detection, T113, T115, 365, 469
- development, 3, 251, 633
- developmental programming, W331
- Dextran, 611
- dextrose, 819
- DFM, W394, 156
- DGAT, 162
- DGAT1, T43, T46
- DGGE, T342
- DGS, W179
- DHA, 685
- DHI, M32
- DHIA, T252, 229, 274
- DHIA records, M282
- diacetyl, W67
- diagnosis, M47
- Dichelobacter nodosus*, T387
- diet, M164, M246, 624
- diet formulation, 410
- diet selection, T381, W322, 463
- dietary cation-anion difference, W116, 111
- dietary choices, 356
- dietary energy, 629
- dietary escape microbial protein, W353, W354
- dietary fat supplementation, M173
- dietary fats, 137
- dietary fiber, T201, T414
- dietary lysine, 387
- dietary net energy, T190
- dietary protein, M362, W279, 79, 666
- differential expressed gene, 752
- differentiation, 840
- diffusion of solutes and enzymes, 722
- digestibility, M223, T189, T283, T357, T380, W369, W388, W402, 215, 380, 422, 445, 571, 758, 845, 870
- digestibility marker, T179
- digestible energy, 50, 625, 843
- digestion, M359, M396, T299, T311, W64, W399, 54, 382
- digestion kinetics, 424, 425
- digestive diseases, 529
- digestive tract, W321
- digital dermatitis, M40, 541
- digital imaging, 457
- digital media, 44
- direct-fed microbes, 438, 574
- direct-fed microbial, M343, M369, T311, 282, 580
- disbudding, 311
- disease, M165, M172, 18
- disease control, 193
- dispersibility milk, W77
- displaced abomasum surgery, 74
- distance education, T427
- distance learning, 806
- distillers grains, M169, M299, M300, T272, T355, T400, W326, 75, 84, 115, 116, 123, 126, 231
- distillers grains plus solubles, 121, 415, 561
- divergence, 429
- DM changes, T330
- DM degradability, T369
- DM digestion, M378
- DM production, T125
- DMI regulation, 129
- DNA extraction, 714
- DNA marker, T34
- DNA methylation, 368
- DNA pooling, 18, 336
- docosahexaenoic acid (DHA), M385
- dog, T56, T61, T62, 489
- dogs, T63, T64
- donkey, M77
- dose, 221
- double-choice, T185
- double-Ovsynch, T219, 232
- dressing percentage, T271
- dried citrus pulp, M410
- dried distillers grains, M289, 57, 122, 292, 677, 681
- dried milk, W311
- drone, T26
- dry cows, M351
- dry distillers grain with solubles, M155, M359
- dry matter, M202, M352, T134, T323, 426
- dry matter intake, M370, T280, W255, 337, 553, 564
- dry matter yield, W90
- dry period, W147, W324, W337, 837
- drying methods, W198
- duodenal flow, M342
- duodenum fluid, T344
- durancin, T79
- dynamic model, T246
- dystocia, 810
- E**
- E. coli*, M41, T237, T390, W189, W349, 252, 273
- E. coli* K88, W186, W193
- E. coli* O157:H7, T102, T105, 120, 358
- early lactating dairy cows, W325
- early lactation, T306, 790
- early-lactating cow, W365
- earning, T158

eating habits, 888
 eCG, M253, T235
 economics, M281, T248, T249, 279, 281
 edible portion, W172
 education, M103, T425, 343, 505, 506, 513, 810, 811
 educational methods, M269
 effective fiber, M319
 effective population size, 334
 efficiency, M7, M181, T280, W182, W216, W323, W330, W418, 25, 27, 319, 874
 egg booster, 759
 egg production, M82, M83
 egg quail, T99
 egg quality, W201
 EGUS, 100
 Egyptian cattle, T6
 electric field, 211
 electrical conductivity, 167
 electrical resistance, 213
 electrolyte, 621
 electronic identification, T268
 ELISA, T9, 237, 238, 699
 ELISA kit, T1, 16
 embedded, T82
 embryo, M238, T225, T243, T247
 embryo development, 651
 embryo transfer, T248, 652
 embryonic mortality, T267
 emission, W281
 emission rate, W278
 emissions, W275, 848
 Emmental cheese, W69
 employee safety training, 504
 emulsifier, M206, W134
 encapsulation, M92, 822
 endemicity, 191
 endocrine activity, W223
 endoglucanase, W119
 endometritis, T244, 704, 816, 819
 endoparasites, 463
 endotoxin, 518, 655
 endotoxin assay, W2
 energetic efficiency, T284
 energetics, W239
 energy, M402, T191, T193
 energy and nutrient utilization in swine, M200
 energy balance, W247
 energy efficiency, 632
 energy expenditure, T303
 energy metabolism, T233, 401, 833
 energy overfeeding, 77
 energy source, 423
 energy status, M193
 energy substrates, W368
 energy values, T376
 eNOS, M257
 ensiled, T172
 enteric methane, 409
 enteric methane emission, W362
 enteric neurons, 529, 530, 531, 532
 entero endocrine cells, 529, 530, 531, 532
Enterococcus, W67
 enumeration, 876
 environment, M110, M261, 515, 645, 655
 environmental enrichment, M14
 environmental impact, 405, 406, 410, 466
 enzymatic complex, M211
 enzyme, T175, T176, 219, 220, 221
 enzyme utilization, 441
 enzymes, M210, M310, T357, W102
 EPEC infection, M301
 epidemiology, 698
 epigenetics, 523, 671
 epinephrine, 130
 EPS, 611
 eQTL, 718
 equine, M21, T152, T156, T157, T162, T163, 628
 equine chorionic gonadotropin, 263
 equine gastric ulcer syndrome, 100
 equine safety, T155
 equipment, 493
 ergot alkaloids, W211
 ergovaline, M131
 errors, 30
 erythrocyte membrane, W336
Escherichia coli, M287
 essential amino acids, T181
 essential oil, M276, M363, M380, M388, T273, T321, T375, W317, W344, W382, W384
 estimate method, M188
 estimates of variances, W33
 estradiol, 268
 estradiol and eCG, W230
 estradiol benzoate, T220
 estrogen receptor, T206
 estrous detection, M234, 280
 estrous goats, W420
 estrous synchronization, 101, 536
 estrus, T216, T226, T241, W220, W280, 87, 270, 271, 469
 estrus behavior, M163
 estrus detection, M163, 236
 estrus response, 583
 estrus synchronization, T222, T223, T232, W422, W423, 265, 891
 ethanol, W390
 ethanol by-products, M409
 ethanol emissions, W109
 ethanolic extract, T251
 ethics, 467, 468
 ethology, M19
 eucalyptus, T140
 European quails, 484
 euthanasia, 8, 9, 10, 11, 12, 181
 euthanasia techniques, 12
 exams, T423
 excretion, W304
 exercise, 556, 620
 exhibition, 512
 exit velocity, 460
 exogenous enzymes, W119
 exogenous fibrolytic enzyme, W118, W325
 exogenous proteolytic enzyme, W286, W287
 exopolysaccharides, 825
 exotic animals, 342, 490
 experiential, 894
 experimental challenge, 701
 experimental design, 719
 expression, M238
 extended lactation, M286
 extension, M105, 41, 42, 43, 45, 170, 514, 515, 618, 619
 extracellular flux, W224
 extracellular matrix, 839, 840, 841
 extracts, W397
 extruded soybean and whole cottonseed, T301
 extrusion, M89, M157, T58
F
 F1, 480
 facilities, M112
 factor analysis, W363
 FAMACHA, T399
 farm management, 658
 far-off, M358
 fat, T121, 127, 845, 847
 fat and protein recoveries, W61
 fat deposition, T37, W259
 fat deposition and carcass traits, T46
 fat mobilization, T233, T234
 fat profile, W179
 fat quality, 639
 fat reduction, M147
 fat supplementation, T319, T328
 fat thickness, M184, M391, M392, T282, T285
 fat tissue, 585
 fattening lamb, T371
 fatty acid, M30, M73, M194, M305, M331, M367, T197, T322, T419, W87, W163, W302, W333, W376, 247, 298, 299, 566, 708, 748, 778
 fatty acid composition, T195, W137, W166
 fatty acid oxidation, W127, W248
 fatty acid profile, M321, T345, 717
 fear, M27
 fecal bacteria, M427
 fecal egg counts, T395
 fecal fermentability, W334
 fecal microbiota, T348
 fecal score, T352
 feces, T289
 feed, M351, 97
 feed additive, M216, M304, M311, T412, 567, 568, 886
 feed and water restriction, T13
 feed conversion, W265, W407
 feed conversion efficiency, 432

feed costs, M109
 feed efficiency, M170, M180, M183, M184, M317, M372, T21, T285, W24, W54, W253, W255, 4, 157, 338, 572, 712, 713, 791, 873
 feed evaluation, 880
 feed formulations, M285
 feed ingredients, W198
 feed intake, M185, M403, M413, T346, 328, 479, 540, 736, 873
 feed management, M361, 788
 feed processing, M355
 feed restricted, 775
 feed restriction, T209, T335, W358
 feed supplementation, W424
 feeder calf grade, W25
 feeder calves, 326
 feeder cattle, W22
 feeding, M105, M371, T330, W419, 300
 feeding behavior, M1, M6, M9, T296, T336, T340, W112, W252, W330, 73, 129, 318, 579, 859
 feeding frequency, T306, W274, 301
 feeding level, M323
 feeding management, W413, 576
 feeding method, M9
 feeding rate, M334
 feeding time, M370, T318
 feedlot, M14, M295, M423, W178, W181, W284, W285, 51, 123, 414, 547, 550, 551, 552, 556, 680, 862, 863
 feedlot beef cattle, W252, W283
 feedlot cattle, T287, T293, W307, 282, 283, 285, 564
 feedlot diets, M55
 feedlot finishing diet, W302
 feedlot performance, T20, T404, T405, W26, W294, W296, W303, W403, 419
 feedstuffs, T189
 feline, 488, 767
 feline intestinal microbiota, T55
 feline nutrition, T66, T67
 female effect, W425
 female fertility, M61
 females in estrus, W421
 fennel forage, T353
 fermentation, M359, M377, T122, W98, W101, W102, W113, W117, W290, 578, 763
 fermentation efficiency, W382
 fermentation extract, 792
 fermentation quality, W108
 fermentative catabolism, T182
 fermented colostrum, T351, T352
 fermented corn, M204
 fermented oat, M205
 fermented soybean meal, T193
 fermented wheat, M203
 fermenters, W384
 ferric reducing antioxidant power (FRAP), 732
 fertility, M165, M251, M326, M327, T235, T241, W222, W227, W412, 7, 708, 770
 fertilization, M137
 fescue, M129, T274, W262, 289
 fescue toxicosis, M8
 fetal growth, M230, T210
 fetal growth retardation, W139
 fetal programming, 691
 fetus size, W27
 fiber, M296, M381, T205, W277, W375, 215, 422, 757, 763
 fiber diameter, M107
 fiber digestibility, T337
 fiber digestion, T341, W378, W379
 fiber lever, M312
 fibrolytic enzyme, T331, W362, W369
 filtration, 495
 FimH, M41
 finishing, T124, W168
 finishing beef steer, W286
 finishing bull, W296, W297
 finishing cattle, M299
 finishing lamb, M399, M400
 finishing pig, T194, T197, T411
 finishing weight, W406
 fish meal, T178
 fish oil, T61, T62, W376, 831
 5-day CO-Synch + CIDR, 264
 fixed-time AI, 266, 267
 flavor, M143, T70, T381, W72, W82, W322, 67, 68, 176, 259, 601, 602, 605, 721
 flax, T297
 flaxseed, T334, 418
 flaxseed meal, W315
 flow cytometry, T6, T242
 flow-mediated dilation, T59
 fluid milk, T70, T78, T93, 498
 fluorescence spectroscopy, M95
 fluoride, M123
 foaming properties, M84
 folic acid, W314
 follicle, M262, 81
 follicle age, 269
 follicle waves, 106
 follicle-stimulating hormone, M250
 follicular fluid, 650
 Folltropin-v, T225
 food allergies, 530
 food animal, 350
 food intake, T201
 food safety, 156
 foot rot, T387
 forage, M4, M106, M111, M169, M425, T116, T122, T140, T171, T328, W91, W163, W164, W305, W375, 26, 75, 219, 220, 221, 292, 297, 321, 423, 429, 582, 668, 792, 866
 forage quality, W116, 50, 626
 forage sampling, W123
 forage systems, T148
 forage to concentrate ratio, 132
 forage-fed beef, T148
 foraging, 463
 formic acid, W18
 fortification, 140
 fractionation, 827
 frame score, 320
 FRAP, 735
 free fatty acid, W73
 freestall bedding, 783, 784
 freezing point, T406
 frequency, W200, 59
 fresh cows' performance, W319
 fresh Mozzarella, 720
 fresh pasture, 869
 fructooligosaccharide, M214, M217
 fructose, 575
 FTIR, M101, 500
 fucoidan, 253
 full siblings, M60
 full-fat soybeans, M316
 functional properties, 205, 207
 functional survival, 711
 functionality, 502, 503, 607, 615
 fungi, T372
Fusarium mycotoxins, W188
G
 G protein-coupled receptor 43, 244
 Gage R&R, W261
 gain, M415, M416, W265
 gait, T159
 galactoglucomannan oligosaccharide, W187
 galactooligosaccharides, 614
 α -galactosidase, T411
 garlic, T388, W384
 garlic oil, W380
 gas emission, W279
 gas emissions, 645
 gas production, W391
 gas production characteristics, T383
 gastric ulcer, 444, 623
 gastrointestinal nematodes, T394
 gastrointestinal parasite, T391, T392
 gastrointestinal resistance, T90
 gastrointestinal tract, 667, 738
 gel formation, 162
 gelation, 610, 825
 gelation kinetics, 733
 gelation temperature, W62
 gene, T207, W308
 gene expression, M174, M198, T17, T27, T28, T44, T94, W128, W144, W165, 5, 243, 249, 445, 455, 563, 587, 717, 719
 gene polymorphism, W19
 genetic, 795
 genetic and phenotypic trends, W48, W51
 genetic architecture, 32
 genetic correlation, T157, 478, 708, 710
 genetic evaluation, W41, 199, 200, 796
 genetic factors, 326
 genetic group, W285

genetic improvement, T24, 797
 genetic parameter, M81, M83, W45, 473, 474, 703, 707
 genetic resources, 799
 genetic selection, M70, M71, 150
 genetic simulation, T425
 genetic trends, M82, W50
 genetically modified corn, T326
 genetics, M64, T236, 25, 600
 genome sequence, M52
 genome sequencing, 69
 genome-wide association, 336
 genome-wide association study, W56, W57
 genomic, W54, W59
 genomic breeding value, 200
 genomic estimated breeding value, 341
 genomic evaluation, W52, W53, 34, 35, 329, 330, 597
 genomic prediction, 31
 genomic relationship, W60
 genomic relationship matrix, 30
 genomic selection, 29, 30, 32, 33, 36, 38, 39, 199, 331, 332, 595, 596
 genomic-assisted selection, 599
 genomics, 37, 150, 152, 197, 198, 337, 338, 509, 534, 600, 798
 genotype, M400, 598, 716
 genotype \times environment, 26
 genotyping, M51, 22
 Georgia Commercial Dairy Heifer Program, M104
 geriatric animal nutrition, 490
 geriatric animals, 486
 germinated sorghum, M396
 gestation, T181
 GGPG, M171
 GGT, T221
 GHG, T69
 GHR, W235
 ghrelin, T374
 gilt, W202
 ginger, W291
 global proteomics, W138
 β -glucan, M212
 β -glucanase, 94
 gluconeogenesis, M394, T207
 glucose, M309, M310, T221, T255, T316, W203, W390, 404, 664, 739, 772
 glucose absorption, 531
 glucose and lipid metabolism, 420
 glucose meter, M149, T255
 glucose oxidase, 612, 613
 glucose tolerance, T231
 glucose tolerance test, M324
 glucose transporter, M192, 371
 glucose transporter 4, 248
 glucuronic acid, 651
 glue stick, T96
 glutamine, 384, 385, 445
 glutathione, W131
 glutathione peroxidase, T152
 gluteus medius, W162
 glycemic index, T58, T59
 glycemic response, T154
 glycerin, M287, W290, W305, W306, W381, W383, 120, 124, 126
 glycerol, M285, M310, M363, T271, T276, W381, W383
 glycinate complexes, 97
 glycomacropptide, 827
 GnRH, M233, M234, M236, T238, T239, W232, W251, 228, 654
 GnRHR gene, T53
 goat, M22, M199, M322, M339, M401, M402, M410, M411, M412, T8, T45, T97, T384, T388, T389, T395, T396, T398, T402, W406, W411, W412, W414, W419, W420, W423, W427, 52, 436, 483, 686, 687, 729, 797, 798, 799
 goat kid, T397, T409, W410, 684
 goat milk, T406, T407
 goat milk cheese, W73
 Gompertz, W210
 Gonal-f, W217
 Gouda cheese, W71
 grading, T168
 graduate education, 800, 895
 graduate program, 241
 graduation rate, 802
 grain, M336
 grain source, W334
 grant, 240
 granulated paper-clay mix, 628
 granulosa cells, M237, W235, 233
 grape polyphenols, T186
 grass, M134, W260, W269
 grass finished beef, 717
 grass-fed, 524
 grazed grass, 855
 grazing, M64, M165, M247, M402, T136, T139, T142, T149, T303, W236, W249, W263, W282, 52, 398, 402, 454
 grazing animals, M5, M288
 grazing beef steers, W302
 grazing behavior, M17
 grazing cattle, 562, 868
 grazing management, T129, T130
 grazing sheep, W400
 grazing systems, 56
 greenhouse gas, W275, 405, 407, 411, 849, 851, 852, 857
 greenhouse gas emissions (GHG), 406, 409
 greenhouse-effect gases, W258
 grinding, W346, W347
 groundnut paste, 749
 group housing, 175, 262
 group size, W197
 grouping, M267, 814
 grouping cows, 878
 growing beef cattle, 560
 growing cattle, W298
 growing pigs, M203, M204, M205, M213, M215, T414
 growing-finishing cattle, M293
 growing-finishing pigs, 843
 growth, M137, M182, M188, M190, M290, M325, M412, T269, W25, W28, W29, W36, W307, 300, 520, 565, 593, 694
 growth and apparent digestibility, W327
 growth and blood biochemical parameters, T304
 growth and digestion, M323
 growth and reproductive traits, T51, T52, T54
 growth and yield, 225
 growth curve, W47
 growth factors, 779
 growth hormone, T261, W135, 148, 775
 growth inhibition, M375
 growth parameter, M188, M191
 growth performance, M203, M205, M214, M215, M219, M225, M226, M293, M387, T180, W133, W134, W283, W286, 438, 638
 growth traits, W48, W49, W51
 gums, T373
 gut, 383
 gut entry rate, M333
 gut epithelial cell line, W3
 gut health, W131
 gut histology, W185
 gut microbiome, 764, 765, 766, 767
 gut microbiota, T57, 591
 gut sensing, T202
 GWAS, 335

H
Haemonchus contortus, T4, T395, T401
 hair ewes, M422
 hair quality, T63
 hair sheep, 581
Halocnemum strobilaceum, W370
 ham, W159
 handling, 304
 haplodiploid, T26
 haplotype, T3
 haptoglobin, T2, T12
 harvest efficiency, T131
 hay, T147, 875
 haylage, W393, 48
 hCG, M162, T164, W231, 232
 HDL, M237
 health, M45, 487, 694
 health management, W11
 health risk status, T20
 heat load, 308, 459
 heat stress, M8, M12, M18, M186, M187, M242, M254, M256, M263, M270, M275, T243, T247, T248, T416, W239, 85, 155, 168, 309, 458, 648, 674, 789, 812, 836
 heat-denatured protein, M153

Heatime, M234
 heating, T116
 heat-stressed, M280
 heavy pigs, T195
 hedonic, W195
 heifer, M155, M191, M298, M356, T44,
 T220, T320, T339, W215, W230, W326,
 122, 151, 269, 328, 454, 743, 866
 heifer development, 508, 535, 536, 548
 heifer growth, M104, M189
 heifer nutrition, 663
 heifer survival, M66
 hematology, T386
 heparin binding protein, 544
 hepatic energy metabolism, T234
 hepatic oxidation, 129
 hepatocyte, W240, 164
 herd development, 152
 herd efficiency, 510
 herd turnover, 781
 Hereford, 40
 heritability, T157, W17, W37, 157, 275, 337,
 456, 470, 537, 713
 heterogeneous variances, M61
 heterosis, 472
 high immune response, W11
 high moisture corn, W97
 high performance ion chromatography, 113
 high pressure processing, W65
 high protein, T227, W141
 high traffic area, T156
 high-concentrate diet, M9
 higher education, 354
 high-pressure processing, 496, 497
 high-protein distillers dried grains, 638
 high-risk calves, 119
 hilly regions, 22
 hindgut, T289
 hindgut fermentation, T205
 Hispanic, 894
 Hispanic-serving institutions, T426, 893
 Hissardale sheep, 741
 histidine, 575
 histology, T327
 histotroph, W138
 HMG, W217
 Hofmeister series, 724
 Holstein, M239
 Holstein calves, M364, 125
 Holstein cattle, W57
 Holstein cows, M33, M328, M353, T223,
 W348
 Holstein heifers, M283
 Holstein male calves, W112, W125
 Holstein milk, W88
 Holstein steers, T319
 homeorhesis, 90, 674
 homogenizer, 494
 Honamli goat, T386
 honeybee, T26
 hoof care, 153
 hops, T367
 hormone, W183
 hormones, W246, W400, 396, 868
 horn fly, 716
 horse, T154, T159, 542, 622, 623, 624, 626,
 627
 horse ownership, T151
 horsemanship, T428
 horses, T160, W122
 host health, 764, 765, 766, 768
 host-defense, 832
 hot dog, T81
 house flies, 782
 house fly, 786
 housing, M164, 163, 461, 550
 housing density, T417
 housing systems, M2
 HPLC, 449
 human health, 376
 humans, 375
 humid environment, 155
 humidity, 785
 husbandry, 486
 hybrid striped bass, T24
 hydrogen peroxide, 501
 hydrogen sulfide, T366, 290, 412, 416
 hydrolysate protein, 365
 hydrolysis, W115
 hydroponic green wheat, W405
 hypocalcemia, 773
 hypothalamus, 774
I
 Iberian pig, T231
 ice cream, 614
 IgE, T30
 IGF, T243, 742, 834
 IGF-I, T47, W129, W136, W235
 IgG, W14, W142, 76
 IL2, T45
 IL-5, T4
 IL-6, W237
 immune, M8, M44, W12, 399, 588
 immune cells, M57, T23
 immune function, 871
 immune response, M54, T413, W183, W192,
 W231, 703
 immune-castration, T418
 immunity, T5, T15, T258, W309, 127, 254,
 298, 299, 814, 884
 immunocompetence traits, M78
 immunoglobulin, T254, T393, W13, W184,
 W351
 immunological stress, W328
 immunomodulatory, T397
 immunonutrients, T65
 immunosuppression, 696
 implant, W128, 522, 743
 imprinting, T35, 5, 671
 imputation, W53, 330, 331, 333
 in situ, M169, M294, T172, T353, W375,
 425
 in situ degradability, M138
 in situ degradation, M122, M140
 in vitro, M126, M207, T172, T366, 50, 54,
 222, 425
 in vitro digestibility, T119, W120
 in vitro fermentation, M55, T363
 in vitro fertilization, 653
 in vitro gas production, T118, T119, T339,
 223
 in vitro ruminal fermentation, W401
 in vitro ruminal fermentation and microbial-
 N, M116
 inclusion rate, 569
 incomplete milking, W146
 incubation, M80
 index, 479
 indigestible fiber, 424, 425
 individual, T306
 individual feeding, W350
 industrial by-product, T192, T199
 industry, 343
 inflammation, M182, M301, T18, 174, 230,
 516, 519, 520, 542
 infrared, 734
 inhibition, 245
 innate defense system, 813
 innate immunity, W6, W8, 812
 inoculant, W102, W104, W105, 48
 inoculum, M386
 inorganic phosphorus, W268
 inositol phosphate, T354
 insemination, M67, T165
 insulin, M199, M254, T212, T213, T221,
 W228, 71, 400, 403, 404, 739
 insulin resistance, M229
 insulin sensitivity, T231, 836
 insulin-like growth factor binding proteins,
 M248
 insulin-like growth factor I, W135, 91, 164
 intake, M341, T153, T284, T336, W122,
 W292, W343, 412
 intake control, 878
 intake rate, T336
 intake regulation, W330
 integrated across discipline, 695
 integrated grants, 43
 integrated projects, 41, 42, 804
 integrin, W222
 interactions, 609
 interest, M113
 interferon, 543
 interferon gamma, T50
 interferon tau, W245
 inter-individual variability, W401
 interleukin-1 beta, 184
 interleukin-10, M182
 intermuscular fat, W244
 internal marker, T117
 internal organs, M56

- internal parasitism, T388
international, 633
internet, 45
internet based learning, 514
internship, 891
intestinal digestibility, 83
intestinal health, 169
intestinal morphology, T292, T332
intestinal permeability, 648
intestine, T17, T18, 518
intramammary LPS challenge, 403
intramuscular fat, W130, W165, 528
intrauterine crowding, 751
intrauterine GnRH, 103
intrauterine growth retardation, W141
intra-uterine growth retardation, 738
intrinsic marker, W388
introductory equine courses, T428
invasive shrubs, T398
investment, M113
iodine, T166
iodophore, T106
ion chromatography, T114
ionomics, W208
ionophore, M330, T277, T278
Iranian Holstein, M75
Iranian Holstein cows, M277
iron, M344, W79, 879
iron fortification, W80
iron status, M344, 879
ISG-15, 268
isobaric tags for relative and absolute quantification, M31
isoenergetic, M394
isolation, T342
issues, 889
IUGR, 394
IVCPD, M139
IVDMD, M139
- J**
Japanese quail, M219, W133
JDIP, 187
Jersey cow, M262
Jersey milk, W88
Jinhua pigs, 587
job, 239, 241
Johne's, 187, 192, 237, 238
Johne's disease, M47, M50, M54, 23, 182, 183, 193
joint inflammation, 622
judging contests, M115
- K**
kapok, T197
kappa-casein, T42
ketogenesis, 397
ketone, M167, 821
ketosis, 820
kidding rate, W424
- kilishi, 749
kinetics, T318, 222
- L**
L. acidophilus, 502
L. monocytogenes, T110
lab-on-a-chip, M47
laboratory summary, 885
lactadherin, 729, 730
 α -lactalbumin, 205, 824
lactating cow, M316, M360, T300
lactating dairy cattle, T313
lactating dairy cows, M344, 879
lactating goats, 675
lactation, M195, M239, M254, T253, T314, T343, T408, W361, 2, 90, 135, 300, 374, 439, 572, 663
lactation curve, M77
lactation induction, M286, W150
lactation performance, M335, 70
lactic acid, W117
lactic acid and heat, M346, M349, W6
lactic acid bacteria, W93
Lactobacillus buchneri, W97, W107
Lactobacillus casei, 603
Lactobacillus fermentum, 589
Lactobacillus helveticus, 723
Lactobacillus plantarum, T103, W97, W107
lactocrine, 3
lactoferrin, 734
lactogenic hormones, 371
 β -lactoglobulin, M93, 66, 205
lactoperoxidase, M145
lacto-prevalence, 185
lactose, M88, M167
lamb, M393, M396, M420, T393, T400, T404, T405, W152, W397, W402, W403, W405, W408, W416, W417, 581, 584, 677, 684, 679, 681
lamb meat, W154
lamb muscles, 748
lameness, M40, W17, W212, 108, 153, 179, 307, 349, 456, 705
laminarin, 253, 254
laminitis, M174
land clearing, 225
land use, M111
large intestine, M356
laser microdissection, 367
late lactation, T323
lavender, M20
laver, W167
layer hen, T250
layers, T120
LB and ST, T80
LCA, T69
leaf age, M124
lean deposition, 843
learning teams, 802
Legendre polynomial, M76, 712
- legumes, 56
length of storage, 260
leptin, T43, W250
leukocyte, M357, M358, 252, 622
leukocyte differentiation molecules, T6
levan, M214
LH, M260, 776
LH secretion, M233
libido, M231
life cycle assessment (LCA), 406
light interception, T125, T126, T127, T130, T132, T133
lignosulfonate, T359
limit feeding, T320, T340
limiting amino acid, T305
Limousin, W46
linear animal model, 456
linear body measurements, 741
linear model, T29, 471
linear somatic cell score, M272
linear type trait, W52
linkage disequilibrium, T48, 334
linoleic, 138
linoleic acid, T121
Linpro, 418
linseed, M320
linseed oil, T317
lipase, M94
lipid, W203
lipid class, W352
lipid conformation and nutrient availability, T377
lipid deposition, 718
lipid metabolism, M194, T177
lipid oxidation, W164
lipid raft, 518
lipids, M332, T408, W64, W409, 134
lipogenesis, 243
lipogenic gene expression, 829
lipolysis, W68, W69, W73, W83, W132, W337, W368, 130
lipolytic state, 579
lipopolysaccharide, M42, W1, W4, W5, W9
lipopolysaccharide challenge, W234
lipoteichoic acid, W4, W5, W7, W9
liquid diet, T352
liquid feeding, M201
listeria, T111
Listeria, T79
Listeria monocytogenes, T113, 496
live body weight, 741
live yeast, 355
liver, M229, T217, T416, W196, W236, 398
liver mRNA, W400, 868
livestock, 351, 410, 617
livestock auction, W22
livestock production, 619
LMMC, 607
local food, 466
locomotion, 711

loin eye area, M391, M392
long-chain PUFA, W336
longevity, 487
longissimus, T271
Longissimus dorsi, W176, W178
longissimus muscle, W172
longissimus muscle area, T282
longissimus thoracis, T27
longitudinal, 182
low fat, W72, W74, 601
low fat cheese, M150, 497, 725
low protein diet, T154
low SCC, M160
low-starch diets, T338
LPS, M12, M36, 538, 539
luteal, T228
luteal function, 102
lutein, W76
lymphoid tissue, W185
Lys:Thr ratio, T180
lysine, T95, W308, W386, 386

M
macrophage recruitment, 184
magnesium, W396, 573
maintenance, M415, M416, 437, 565
malate, M318
male calves, 776
male effect, W420, W426
male Holstein calves, M296
male rabbits, W242
mammary, M195, M198, 6, 250
mammary cells, M193
mammary development, 1
mammary epithelial cells, 148, 829
mammary gene expression, 831
mammary gland, M190, M196, T409, W149, 2, 5, 89
mammary immunity, 403, 702
mammary involution, 368
mammary metabolism, 373
mammary nutrient uptake, 373
mammary stem cell, 78
management, M64, 25, 411, 533, 672
management evaluation, 310
manila ropes, T105
 β -mannanase, T411
mannan-oligosaccharide, T10, W186
manure, W277, W281
manure solids, 781, 784
marbling, 243
marbling deposition, 560
mare, T161, T164, T165, 654
marker density, W53, 330
markers, W267
markers of body reserve status, 396
market price, 326
market research, 142
Markhoz kids, 434
mash, 261
mass balance, 286, 561
mass spectrometry, W66, W158
mass transfer, 735
mass transfer coefficient, W273
Master Graze, W91
mastitis, M28, M29, M103, M176, T2, T253, 15, 154, 171, 172, 173, 174, 235, 473, 697, 700, 701, 702
mate choice, M22
maternal dietary protein, W156
maternal effects, W33, W34
maternal nutrition, 549, 739
mathematical model, 106, 293
mathematical modeling, M77, 188
matrix, W60
matrix effect, W158
matrix value, T175
mature size, 27, 320
maturity, M135
MC1R gene, 687
meadow fescue, W124
meal criteria, T295
measurement, W270, 407, 856
measurement of metabolizable energy, T361
meat, M79, W157, 375
meat and organ, W333
meat characteristics, W152, W153
meat goat, M114, T391, T392, T403, 582, 661, 662
meat quails, W151
meat quality, M424, T16, T28, T194, W43, W170, 443, 526, 841
meat tenderness, T37, 634
mechanism of action, 590
media role, 465
Medicago sativa, M123
Medicago sativa L., M133
Megalac E, T216
Megasphaera elsdenii, 683
Mehraban lambs, M418, M421, W398
Meishan pig, W156
melamine, T256, T315, W367
melatonin, T210
membrane, 372, 495
membrane permeation, W278
Mendelian sampling, 37
mentoring, 894
merged experiments, 316, 317
MERLOT, 896
meta-analysis, M319, M413, W325, 107, 137, 282, 316, 317
metabolic and clinical response, W5
metabolic control, 673
metabolic disease, M42
metabolic mechanism, T256, T315
metabolic profile, M278, T49, T258, T259, 80
metabolism, M229, M239, T192, W216, 383, 539, 669, 671, 674, 681, 721, 779
metabolites, M30, M419, T227, 396
metabolizable energy, M117
metabolizable methionine, W366
metabolizable protein, M328, M338, W221, 680
metabolizable protein restriction, T311
metabolomics, T267, 385
methane, M170, M337, T328, T363, W272, W274, W276, W277, W290, W360, W380, W382, W401, 116, 407, 850, 856, 857, 874
methane and ammonia, M116
methane emission reducing diet, 731
methane emissions, 293
methane gas, M427
Methanobrevibacter, 166
methanogene, M390
methanogens, 166
methanol, W306
methionine, T95, T307, T314, W310, 793, 871, 872
methionine hydroxy copper, M326
methionine hydroxy zinc, M327
method, 665
methodology, T189, T360
methyl ketone, M94
methylhistidine, 449
metritis, M41, 811
Mexican sunflower leaf, 586, 682
Mexican sunflower leaf meal, 440, 678
MFGM, 383, 728
MHC class II DRB gene, 186
mice, T177, W191, W192, 257
micellar casein, M87, 64
micellar casein concentrate, M151, M152, 63, 204
microalgae, 831
microarray, M297, T29, W209, W236, 367, 398, 714, 752
microbes, M221
microbial additives, W100, W108
microbial contamination, M381
microbial crude protein, M379
microbial diversity, 541
microbial efficiency, 864
microbial fermentation, 158
microbial growth, T370
microbial N, M395
microbial nitrogen, T286
microbial populations, T364, 812
microbial protein, 227
microbial protein synthesis, 223
microbiome, 667
microbiota, T64, 92
microbiota diversity, M389
microencapsulation, M85, T90, T91, T104, W79, W80
microfiltration, 64, 65, 203
micronutrient, M350
micronutrient supplement, 696
microorganism, M304, M330
microscopy, W115
microsphere, 824
microstructure, M97, M102

- microwave irradiation, T369
mid-infrared, 850
mild pulsed electric fields, T86, T87
mild sonication, T83, T84, T85
milk, M73, M97, M100, M101, M367, T76, T113, T114, T115, T166, T264, T310, W78, W80, W86, W312, W332, W333, W357, W359, 139, 144, 209, 213, 372, 734, 847, 850
milk adulteration, 365
milk and milk products, 185
milk aroma profile, 309
milk bioactive, 832
milk Ca, M332
milk coagulation, 733
milk coagulation properties, 707
milk composition, M266, M328, M345, M365, T42, T174, T349, 586
milk ELISA, M32
milk fat, M282, T334, W345, 135, 147, 231, 789, 791
milk fat depression, M322
milk fat globule membrane, 729, 730, 826
milk fatty acid composition, W360
milk fatty acids, M320, M322, M337, M342, T317, T321, 134, 160, 668
milk feeding level, M325
milk flavor, T150
milk flow, 38
milk fraud, M96
milk metabolites, M36
milk oxidation, 732
milk production, M60, M74, M173, M266, M268, M368, M404, T297, T350, W94, W210, W229, W364, 155, 227, 306, 421, 663, 790, 837
milk production and composition, W7
milk properties, 731
milk protein, T95, 71, 382
milk protein concentrate, M84, M152, 206
milk protein powder, W63
milk pulsed electric fields, T88
milk quality, M69, M96, M272, M274, T72, T75, T111, T253, 170, 352, 353, 596
milk replacer, M168, M187, M334, T292, T305, W197, W317, 85, 86, 295, 296, 301, 630, 685
milk response, T298, W318
milk safety, T106
milk serum protein, 202
milk synthesis, 835
milk urea nitrogen, M277, 787
milk yield, M267, M317, M318, T40, T333, W146, W261, 82, 91, 308, 678, 820
milk yield and milk fat content, M264
milk yield and milk protein, M277
milking, T106
milking frequency, M72, M281, T409, 402, 832, 833
milking interval, M72
milking management, W143
milking preparation, M34
Min-Ad, 283
Minas Frescal cheese, T109
mineral, 144, 321
mineral profile, 439, 440
mineral status, M397, 53
miniature, 621
mink, T60
Mintrex, W214
miRNA, 374
mitochondria, W224
mixed, W157
mixed models, 34
mixed-species, W414
mixing, M26, 178
mixture models, 32
mobile bag technique, T358
model, M18, 191
model pigs, W203
modeling, 319, 323, 430, 735
modern techniques, 692
modified distillers grains, T281
modified yeast extract, W21
moisture, M98
moisture content, W198
molasses, T149, W111, W315
molasses and urea, T380
mold, T123, 842
molecular genetics, 798
molecular marker, T36, T37, T39, W58, 715
molecular mechanisms, 88
molecular structures, T377
molybdenum, W298
molybdenum and copper, 121
MON810, 446, 447
monensin, M289, M295, M363, T212, T288, T321, W313, W323, W394, 73, 138, 558, 669, 670
monitoring, 173
monoclonal antibodies, M50
monoesterate, 844
Montbeliarde, 472
Monte Carlo, 109
MooMonitor, T240
morbidity, 547, 551
Moringa oleifera, M220, W190, W389
morphology, T226
morphometric measurements, W31
mortality, M37, W37, 276, 394, 780, 781
motility, T270
mouse, M74
mozzarella, W74
MPC80, 207
mRNA, W241, 769
mTOR, 542
Mulato II, 55
mulberry leaves, M122
mulberry pomace, T172
multibreed, W43, W54, 36
multidisciplinary interactions, 692
multi-enzyme, M206
multiple infections, 190
multiple mix, T291
multiplex PCR, 359
multi-purpose tree species, 224
multi-trait vs. random regression, W46
multivariate analysis, W194, 482, 483
muscle, M192, W129, 527, 635, 750, 778, 839
muscle development, 751
muscle type, W167
mushrooms, W391
mutation, W60
Mx2, 268
Mycobacterium avium ssp. *paratuberculosis*, M48, M49, M52, M53, 184, 185, 189, 190, 191
mycoplasma, 697
Mycoplasma, 15
mycotoxin, M340, T101, 883, 884, 885, 886
mycotoxin inhibitor, 760
Myf5, W244
myoblast, 744
myoepithelial cell, 369, 370
myofiber types, W160
myogenesis, 745
myogenic differentiation, T374
myosin, T184
myostatin, 861
myostatin suppression, T25
N
N use efficiency, 57
n-3 fatty acid, T194, T200
n-6/n-3 ratio, T322
Na⁺/K⁺ pump, W239
NaCl reduction, 61
naloxone, 649
nanoemulsion, M93
nanoginseng, W77
nanoparticles, 66
native plants, 223
natural beta-acids, T107
natural service, M256, M259
NCAPG, 718
NDF, 870
NDF digestibility, W339, 430, 792
NDF digestion, 131
NDF intake, 432
NDF-D, 146
NE_g, 118
near-infrared, M79
near-infrared spectroscopy, T293, 707
NEFA, W132
Nellore, M19, M292, M312, W284, W300, W301, W374, 565
Nellore, T245, W256
Nellore heifers, M244
nematodes, T11
net energy, W38
net feed intake, M56
neutraceutical, T97

neutral detergent fiber, M133, 217
 neutral detergent fiber digestibility, W120
 neutrophil, T7, 696
 new infections, T252
 new social participatory media, 44
 newborn, 817
 newborn calves, W4
 niacin, M280, M317, M366, 130, 789
 Nigeria, W411, 482, 483, 688, 689
 NIR, T121, W392, 426
 NIRS, W385
 nitrate, M390, T368, 362
 nitrite, 358, 362, 378
 nitrogen, M159, M271, M308, W226, 115, 286, 864
 nitrogen balance, M338, 680, 757, 855
 nitrogen efficiency, M368
 nitrogen excretion, M300
 nitrogen fractionation, 227
 nitrogen metabolism, W328, 72
 nitrogen non-protein, M354
 “no antibiotics added”, 360
 no gold standard, 182
 nonesterified fatty acids, 821
 non-fat dry milk, M89
 nonfat process cheese, 724
 nonfat yogurt, W84
 non-forage fiber, W340
 nonlactating cows, W116
 nonlactating goats, M397
 nonlinear models, W32
 normal, T295
 Normande, M68
 novel biomarker, 78
 NPY gene, T52
 NSAID, 14
 nuclear receptor, W238, 397
 nucleotides, 762
 nursery, T196, 641
 nursery pig, T269, W205, 98
 nutraceuticals, T65
 nutrient, M127, M341, 522
 nutrient absorption, M339
 nutrient digestibility, M204, M225, M326, M327, M387, 755
 nutrient excretion, 642, 645
 nutrient intake, 571
 nutrient management plan, 643
 nutrient matrix value, T176
 nutrient requirement, 386
 nutrient restriction, T211
 nutrient sensing, T201
 nutrient supply, M361, W399
 nutrigenetics, 693
 nutrigenomics, 693
 nutrition, M420, T187, T214, T236, T275, T427, W154, W219, W241, W246, W324, W409, 378, 402, 491, 657, 691, 788, 892
 nutritional quality, W389
 nutritional restriction, M290
 nutritional supplementation, W427
 nutritional treatment, 769
 nutritive value, M132, M141, T383, W110, 867
 nylon bag, M382

O
 oak acorn, 434
 oat crop residue, 291
 oats, W282, 53
 OBCFA, M342, W352
 obesity, 488
 ochratoxin A, 675
 odor, M221
 offal, 747
 off-flavor, 210
 off-season, T165
 offspring, 750
 okara, 436
 oleic, 138
 oleic acid, 244
 omega-3, W137, 140, 818, 846
 omega-3 fatty acids, 726
 omic approaches, M28
 OmniGen AF, M350, M357, T17, W309
 on-farm assessment, M175
 on-farm processing, M108
 on-farm tool, M106
 online, T402, 896
 online courses, 895
 online learning, T155
 ontogeny, 532
 oocyte growth, 650
 Optaflexx, W289
 optimization, W78
 oral lipopolysaccharide, W7
 oral lipoteichoic acid, M35
 orange pulp, M393
 organic, M176, M284, 351, 452
 organic acids, M150, W69, W185
 organic beef, 632
 organic cows, T149, W315
 organic dairy cows, M278, T258
 organic matter, M120, T355
 organic matter digestibility, M207
Origanum vulgare, M372
 original chicken breed, M79
 oronasal, M42
 oronasal application, M36
 oronasal lipopolysaccharide, W8
 osteoarthritis, 491
 osteoblast, 740
 osteoperosis, T8
 osteopontin, T3
 otitis media, W15
 outdoor pig production, T144
 outdoor pork, M110
 outreach, 345
 ovarian follicles, M246, T217
 ovarian hemodynamics, M245
 ovary, M247, T161, T214, W219

overrun, 615
 overstocking, 401
 ovine, 714, 869
Ovis aries, T222
 Ovsynch, M162, M235, T235, 104
 ovulation, T229, 87, 102, 103
 ovulation synchronization, W422
 ovulatory disorder, 471
 oxidative stability, W291
 oxidative stress, W377, 589
 oxytocin, M268, 175
 ozone, M146, 408

P
 P and S, W288
 P efficiency, W207
 p63, 369
 packaging, T72
Paenibacillus, T74, T78
 pain, 311, 312
 pain management, 235
 paired housing, M13
 palatability, M426, T185, W292
 palmitic acid, 133, 160, 791
 palmitoleic acid, W127, 246
 panicked tick-clover, T401
 PAP, W300, W301, W313
 papillae, W299
Parascaris equorum, 592
 parasite, T14, T389, T398, T400, 592, 686
 parasite control, T384
 parasite resistance, T4, T399
 parathyroid hormone, 773
 paratuberculosis, M51, M54, 22, 186, 188, 698
 parent average, M70
 parentage, 329
 parity, M242, T324, 591
 parthenogenetic activation, M177
 particle size, M158, 428, 431, 880, 882
 partition, M134
 parturition, M27
 passage kinetics, 431
 passive immunization, M304, M311, 567, 568
 passive transfer, 277
 passive transfer of immunity, T173, W16
 pasteurization, 209, 492
 pasteurize, 492
 pasture, M59, T124, T137, T156, W86, W293, W318, 411, 576
 pasture and forage, W414
 pasture based swine, M110
 paternal imprinting, W23
 pathogenic bacteria, M375
 pathway, 192
 pathway analysis, M249
Paulownia, M137, T118
 Pax3, W244
 PCR, 697
 PCR-RFLP, T32, T38, T40, T41, T50, 715

pea crop residue, 291
 pea starch, T58
 peach, W113
 peanut flour, W75
 pearl millet, 55
 pectin, 608
 pedagogy, 805
 pedometers, M17
 PEF, 211
 PEG, M125, M126
 Pelibuey sheep, M417
 pellet, T269, 261, 756
 penalty, 364
 PEPCK, T207
 peptide, 381, 864
 perception, 9, 887
 performance, M13, M211, M224, M283, M298, M401, T10, T175, T176, T291, T412, W205, W254, W269, W340, W417, 14, 24, 136, 297, 434, 435, 436, 519, 552, 743
 performance and fecal phosphorus, M398
 performance test, T391, T392, W47
 performance/soybean meal, 388
 perilipin, W250
 peripartum, 794
 periparturient, M31, 433
 periparturient hypocalcemia, W19
 periparturient period, 672
 peripheral tissues, 88
 persistency, M75, 475
 persistent follicle, M227, T215
 pH, W180, 322, 725
 pH values, W100
 phagocytosis, 828
 phenotype, 598
 phenotype microarray, M49
 phenotypic variance, W40
 phop mutant, M49
 phosphate, 258
 phospholipase A2, W253
 phospholipid, 372, 728
 phosphorus, M222, M347, M356, 93, 788
 phosphorus availability, T354
 phosphorus balance, M329
 photo-oxidation, W70
 photoperiod, W426
 physical form, W335
 physiological responses, 637
 physiology, W220
 phytase, M210, M398, T179, T354, 92, 95
 phytate, 113
 phytobiotic, 759
 phytochemicals, T18
Pichia pastoris, 218
 pig, M23, M25, M26, M201, M210, M221, M222, M224, M225, M230, M238, T104, T178, T182, T184, T188, T190, T196, T200, T203, T204, T410, T413, W131, W139, W196, W208, W209, W214, W234, 93, 95, 96, 99, 178, 180, 258, 261, 386, 389, 390, 391, 392, 393, 448, 451, 477, 478, 588, 637, 638, 639, 648, 738, 751, 754, 756, 845
 pig feed, 441
 pig growth, T27, T200, 387
 pig health, 446, 447
 pig performance, T417
 piglet, T412, T415, T419, 181, 589
 piglet birth weight, 658
 piglet performance, 755
 piglets, W195, 94, 762, 844
 pima cottonseed, W364
 pine bark, M427
 planktonic, T82
 plant botanicals, W323
 plant extract, T273, W189, 255, 256, 759, 874
 plant growth, T137
 plant histology, W369
 plant secondary metabolites, W118
 plasma, T166, W203
 plasma fatty acids, W352
 plasma metabolites, M35
 plasma proteome, W1
 plasma urea N, M308
 plasmin activity, T385
Pleurotus djamur, W121
 polioencephalomalacia, 415
 polyethylene glycol, M117, M128
 polymerized whey protein, M85
 polymorphism, T30, T32, T47, 186
 Polypay, 690
 PON, M237
 porcine, M186
 porcine lactoferricin, 361
 porcine ovarian follicles, T206
 pork characteristics, T265
 pork quality, 442, 512, 753
 pork/beef, 749
 postgrazing height, T127, T130
 postnatal growth, M179
 postprandial glycemia, T61, T62
 postsurgical pain, 74
 postweaning feed efficiency, T22
 postweaning growth, 303
 potassium, 570
 poultry, M220, T198, T199, W190, W204, 360
 poultry fat, M208, M209
 powder, 208
 PPAR, M303
 PPAR γ , 147, 742
 PPAR γ 2, T224
Pragmates australis, W372, W373
 preadipocyte, 247, 248, 528
 prebiotic, M217, T250, W81
 pre-breeding weight, 548
 prececal digestibility/amino acids, 388
 precision dairy farming, 110
 precision feeding, 426
 preconditioning, W25

prediction, T112, T145, 208, 251
 prediction equation, W360, 564
 predictive ability, W58
 predictive models, W418
 predictors, 892
 preference, W292, 176, 177, 626
 preference trial, 49
 prefetch, M366
 pregnancy, T210, T211, T227, T228, W221, 543
 pregnancy associated glycoprotein (PAG), W27
 pregnancy loss, M62, T238, W251
 pregnancy rate, M256, T239, T245, 236, 257, 583
 pregnancy-lactation, M422
 pregnant ewe, 440
 prenatal stress, 588, 647
 parturient diet, M46, M353
 parturient dietary energy, 669, 670
 prepuberal, T220
 prepubertal mammary growth, 1
 preservative, T81
 presynchronization, M156, M235, 102, 104, 105, 232
 preterm, W140
 prevalence, 23, 363, 885
 Pre-Vent feeder, 627
 prevention, 141
 preweaned, 435
 principal component, 36
 pro pre biotic, 765
 probiotic, M85, M212, M226, M387, T63, T64, T76, T83, T84, T85, T86, T87, T88, T91, T92, T250, T304, W81, W85, 69
 probiotic cheese, 502
 probiotic ice cream, 615
 probiotic lactobacilli, M43
 probiotic yogurt, T90, 612, 613
 process cheese product, 63
 processed meats, 378
 processing, 209, 569, 862
 producer education, 509
 production, M369, T312, W262, 278, 348
 production disease, 7
 production performance, T301
 productive performance and carcass quality, T418
 productivity, W256, W415, W416, 405
 proestrus, 105
 profit, M113
 profit margin, 632
 profitability, M109, 109
 progesterone, M233, M243, M244, M262, T212, T213, T215, W215, W228, W264, 81, 164, 228
 progestogen, T222
 prolactin, M255, T94, 2, 91, 366
 prolactin receptor, 366
 prolonged feeding, T307
 1,2,3-propanetriol, W381, W383

properties, W87
 prophage, T102
 propionate, M313, W379, 302
 propionate salt, W257
 propionibacteria, T92
Propionibacteria, W68
 propionic acid, 579
 propolis ethanolic extracts, T322, W312
 propylene glycol, T213, 820
 prosaposin, T97
Prosopis laevigata pods, M141
 prostaglandin, M243, 264, 265
 prostaglandin F_{2a}, M156, T237, 270
 protease, 165
 protease enzyme, T60, 873
 protected fat, M392, T288
 protected minerals, T359
 protection, T314
 protein, T257, T291, W195, W269, W338, 59, 84, 754
 protein aggregation, 380
 protein and fat retention, T346
 protein balance, W308
 protein concentrate, T369
 protein degradation, W385, W387
 protein expression, 218
 protein fat ratio, M282
 protein fraction, M138, T351, W392
 protein hydrolyzate, T370
 protein metabolism, T66, T67
 protein protection, T371
 protein quality traits, 260
 protein reduction, W201
 protein source, W175
 protein supplementation, W274, 549
 protein synthesis, T263
 protein turnover, 393
 proteoglycans, 839
 proteolysis, W83, W159, 635, 636, 841
 proteome, 527, 650
 proteomics, W139, 174, 636, 728
 PRRS, 335
 PRRSV, T29, T410, 255, 256
Pseudomonas, T103
 PSPB, M62, M63
 PSPS, W363
 psychrotrophic, M86
 psychrotrophic bacteria, T71
 puberty, M191, W230, 327, 533, 534, 536, 545, 629
 PUFA, W228, W229
 pulsed light, T75
 purification, T1, 16
 purified lignin, W307
 purine derivatives, T286
 purines, T118
 purple prairie clover, M127, T356
 pyrosequencing, T57, 766, 860
 pyruvate carboxylase, M71

Q
 qPCR, T80
 QTL, T39
 QTL-by-environment interaction, 339
 quadratic, M178
 quail, T98
 qualitative characteristics, W154, W373
 quality, T73, T109
 quality assurance program, 453
 quality grade, 547, 552
 quantification, W220
 quantitative analysis, M97
 quantitative genetics, W44
 Queso Fresco, W65
Quillaja saponaria, 854
 quinagolide, W147

R
 rabbit, W188, 633
 ractopamine, W289, 443, 555, 761
 ractopamine hydrochloride, 284
 RADG, W45
 radiant, 458
 ram, M231
 ranch sauce, T81
 random regression, W36
 random regression test-day model, 475
 rangeland, T136, W424
 rapeseed meal, 128
 rapid method, M149
 rate, 424
 rate of digestion, 430
 ration formulation, M361
 raw diets, T57
 raw milk, T71, T112
 raw milk quality, T168
 REA, W270
 reactivity, M15
 real-time PCR, M379, T347, T382
 real-time ultrasound, W35
 rearing system, 748
 receiving, 863
 receiving cattle, 419, 420
 receptor, M240
 recovery of nisin, T81
 rectal temperature, 275
 recursive models, 477
 recycled manure solids, 783
 recycling, M333, W78
 red clover silage, M315
 red meat, 376
 reduced sodium, 602, 605
 reduced-fat Cheddar cheese flavor, 603
 reduction, 210
 reed, W99
 reference populations, 597
 reflexes, 10
 refractometer, W14, 76
 regions, 709
 regression, M76, 220
 regulation, M341

relative bioavailability, W204
 reliability, 479
 renneting, 62
 repeatability, 470, 771
 reproduction, M43, M129, M241, M335, M369, T167, T241, T246, T257, T421, W28, W213, W229, W249, W427, 279, 546, 647, 656, 661
 reproduction management, 236
 reproduction model, T236
 reproduction performance, M265
 reproductive axis, 776
 reproductive health, 816
 reproductive hormones, T209
 reproductive management, 508
 reproductive outcomes, W426
 reproductive parameters, T25
 reproductive performance, T223, W263
 reproductive programs, 281
 reproductive responses, W191
 reproductive tract, 327
 reproductive traits, W50
 research, 42
 residual feed intake, M181, M419, T31, T34, T124, W418, 4, 318, 339, 340, 404, 429, 553, 858, 859, 860
 residue byproducts, T198
 residues, M100
 resistance, T11, T14, 468
 resistant starch, 86
 resource materials, 43
 respiratory challenge, T279
 respiratory disease, 24
 response surface plots, M89
 restriction enzyme, T40
 resynchronization, M171, M232, T219, T249, 228
 retentate, M142
 reticular temperature, 161
 retinal image, T268
 retorting, M87
 RFI, W45, 771
 RFLP, T36
 rheology, W62, 492, 608, 610, 724, 727
 riboflavin, W76
 rice straw, M189
 risk characterization, T109
 risk factor, M37, 815
 risk management, M269
 RNAseq, W144, 719
 robustness, 596
 rooster, M223
 root count, T144
 rotational grazing, T126, T132
 roughage, W374, W391
 roughage supplementation, 51
 round-bale feeder, T153
 RRR- α -tocopheryl acetate, T313
 rumen, M240, M385, M388, M389, T318, T359, T362, T364, T366, W344, W367, W368, W396, 75, 290, 573, 580, 670

rumen acidosis, 683
rumen bacteria, T367, 860
rumen degradability, W92, W370
rumen degradable protein, M125
rumen degradation, T308
rumen development, 302
rumen digesta, 867
rumen fermentation, T100, T365, T367, 571, 574
rumen fill, 431
rumen fluid, T344
rumen fluid inoculation, 114
rumen microbiology, T341, 692
rumen microbiome, 768
rumen minerals, M346, M349
rumen NH₃-N, T335
rumen pH, T335
rumen protected carbohydrate, W319
rumen protected lysine, 83, 790
rumen protozoa, 664
rumen undegraded protein, T338
rumen-protected amino acid, M315, M362, M368, W366
rumen-protected methionine, 79
rumen-protected niacin, M263, W377
Rumensin, T375
rumen-undegraded protein, T358
ruminal acidosis, 563
ruminal acidosis-causing bacteria, M376
ruminal bacteria, W362
ruminal binding, W21
ruminal cellulolytic bacteria, T382
ruminal degradability, T356, W371
ruminal degradable sulfur, 412
ruminal degradation, M302, M381, M382, 224
ruminal epithelia, 159
ruminal escape, 83
ruminal fermentation, M311, M407, W287, W397, 70, 676
ruminal fermentation kinetics, M410
ruminal metabolism, W353, W354, W356
ruminal methane, T368
ruminal parameters, W398
ruminal pH, 428
ruminal protein degradation, M294
ruminal temperature, 158, 271
ruminant, M105, M348, M383, M414, M423, T7, W121, W175, 23, 856, 883, 884, 886
ruminant stomach, T361, W341
ruminant stomach morphology, W395
rumination, W280, 131
runoff, M159, M271
RUP, W386
ryegrass, 53

S
SAA, 828
SAA3, W237
Saanen goat, T174

Saccharomyces cerevisiae, M414, M418, M421, W398
safe, T96
safety, M220, 720
safflower seeds, 70
Sahiwal heifers, 629
sainfoin, M117, M118, M119, M120, M426
salinomycin, M291
salivary pH, 444
Salmonella, M39, T104, T107, T204, 357
salt, 124
salt replacers, 60
salt substitution, 606
salts, M84
Sambucus nigra, M136
sandwich ELISA, T2
Santa Inês, M425
saponins, 286
SARA, W321, 667
satellite cell, M186, 247, 258, 522, 838
satellite cells
saturated fat, 160, 376
saturated fatty acid, 131
scalding, 746
SCC, T252, 170, 229, 234, 274, 278, 364
scholarship, 804
science, 467
screening, 219
season, T134, T135, T259, 551, 837
seasonal, T71
seasonal anestrus, W425
seasonal performance, T22
seasonality, 654
seasons of the year, T129
second lactation, M347
second meal effect, T56
Sedilizia rosmarinus, W370
Select Detect, T240
selection, W35, 323
selection signature, 40
selenium, M297, W155, W202, W203, W357
selenium requirement, T152
self assembly, 824
self-medication, 20
self-suckling, W413
selling price, W22, 324
semen, M231
semen quality, M261
semi-automated in vitro gas production technique, W258
sensitivity, 511
sensory, W85
sensory evaluation, W71
separator, 494
SERCA, W160
sericea lespedeza, T389, T390, 686
seroproteome, M29
serotonin, T188
serum metabolites, W24
serum neutralization, T9
serum protein, 65, 204, 737

serum shock, W240
serum total protein, T173, W16
service-sire age, M67
sexed semen, 544
sex-sorted semen, T242
sex-sorting, T208
sexual activity, M411, W425
sexual behavior, W223, W419
sexual selection, M22
shade, T143, 168
shear force, W180, W182, 521
sheath protector, M166
sheep, M245, M395, M409, M424, M425, M426, T264, T381, T382, T387, T408, W135, W150, W153, W322, W404, W409, W415, 19, 250, 433, 482, 585, 688, 689, 797, 799
sheep milk, T407
sheep supplementation, M407
shelf life, T70, T72, 64
Shiga-toxin producing *E. coli*, 359
short form, 366
short- and medium-chain fatty acids, T345, T349
short-chain fatty acids, T284, 829
short-time stress, M279
shrinkage estimators, 332
SIFT-MS, 753
signaling, W129
signaling proteins, M307
silage, M136, M352, M393, T330, T372, T378, W92, W93, W95, W96, W99, W103, W104, W106, W109, W363, W372, W373, W393, 216, 408, 578
silage additive, W105
silage fermentation, W90
silage inoculant, T364, W94
silage variation, W123
simulation, T362, 109
simulation modeling, 657
simultaneous thawing, T245
singeing, 746
single nucleotide polymorphism, T46, T48, 17, 716
single step, 29, 595
single-step genomic evaluation, 599
sire fertility, M65
sire lines, T418
size, 28
size washer, W278
skeletal muscle, W155, W156, 634, 745, 838
skim milk, M88, 139
skim milk fortification, M95
skim milk powder, M148
skinning, 746
slaughter weight, 747
slow release urea, 136
small interfering RNA, M197
small intestine, 778
small ruminant, T399, 795
Smilax sonchifolia, W389

Smartamine, T307
 smooth muscle actin, 370
 SNP, T31, T32, T33, T35, T38, T41, T45, T51, T52, T53, W55, W59, 40, 340, 715
 soaking, M280
 social contact, 314
 sodium, 111
 sodium bisulfate, W103
 sodium butyrate, 169
 sodium caseinate, 62
 sodium chloride, 787
 sodium propionate, W114
 sodium reduction, M147, 60
 software, 208, 333
 soil nutrients, 646
 solubility, M91, W396, 206
 solutions, 349
 somatic cell, T169, 173, 352, 353
 somatic cell count, M33, M69, M343, 171, 473
 somatic cell score, W57
 somatotropic axis, M248, W247, W248
 somatotropin, M286
 sorghum, T378, W211, 55
 sorghum silage, W111, W339
 sorting, T323, T324, 285
 SoTL, 805
 sow, M27, M216, M242, T415, W210, W212, W213, 253, 254, 640, 642, 649, 656, 847
 sow reproductive performance, W211
 soy products, 755
 soy protein, T305
 soybean, T288, T378, 558
 soybean meal, T193, T373, 260, 421, 793
 soybean oil, M208, M209, M374
 special hindquarter, W174
 sperm, T208, W227
 sperm dosage, T242
 sperm mRNA, W412
 spermatologic parameters, T386
 spermatozoa, M228, T163, T270, 450
 sphingomyelin, 826
 spiral wound MF, 204
 SPME, T150
 spoilage, T78, W106, 117
 sporeformers, T74
 spores, T75
 spray-dried plasma, W191, W192, 257
 spray-dried porcine plasma, M23
 SREBP-1, M197
 stability, M384, 503, 612, 613, 614
 stable fly, 786
 stable isotopes, T98, T99, W151
 stage of lactation, M278, T324
 staining, M228
 stall, 461
 stallion, 620
 standard plate count, T254
 standards, 352, 353
Staphylococcus aureus, M28, M29, T108, T112, 700, 702
 starch, M3, M102, M324, M336, M360, T300, W361, 145, 222, 794
 starch hydrolysis, M207
 starter, M296, T325, W335
 starter culture, 500
 STAT5/3, 834
 STAT5B gene, T54
 statistical methods, 316, 317
 steam rolling, W346, W347
 steam-flaked soybeans, M158, M316
 steam-flaking, T309, T310
 stearoyl-CoA desaturase, W355
 stearoyl-CoA desaturase 1, 245
 steers, T148, T279
 Steller sea lions, M248
 stem cell markers, W149
 stem cell niche, 838
 sterculic acid, W355
 sterilization, M151
 steroidogenesis, W238
 stillbirth, 506
 stillborn, M216
 stochastic modeling, 658
 stocker cattle, T146, 56, 57, 249
 stocking rate, T68, T141, T144, T167, 107
 storage, W63, 237
 storage stability, M151
 strain typing, 189, 190
Streptococcus thermophilus, T77, T79
Streptococcus thermophilus biodiversity, 499
Streptococcus uberis, T237, 701
 stress, M20, T5, T143, T160, T229, T290, W271, 305, 357, 392, 399, 523
 stress response, 501
 string cheese, W74
 structural equation models, 484
 student, 239
 student development, 803
 student learning, 804
 student opinion, T420
 student recruitment, 893
 student retention, T426, 802
 Stx2, T102, 358
 subacute acidosis, 575
 subclinical mastitis, T385, 823
 subcutaneous scrotal temperature, 620
 submaximal, 621
 substitution of NaCl, 607
 success, 241
 suckling control, W219
 suckling management, 769
 sugar, M98, M313, 427
 sugar cane, M383, M386
 sugar cane molasses, W402
 sugarcane, M351, W115
 sugarcane top, T379, T380
 sugars, 665
 sulfur, M353, T196, T277, T278, W226, 123, 288, 415, 416, 677, 679
 sulfuric acid, T379
 summer and winter butter, W87
 sun-dried, T172
 sunflower residue silage, M403, M404
 superovulation, T225, W217
 superoxide dismutases, T25
 supervised principal components, 332
 supplement, T141, T276, W170, W267, W293, W318, W350
 supplementary concentrates, 881
 supplementary nitrogen, T370
 supplementation, M5, M288, M302, W404, 58, 559, 562, 866
 surfactant, T319
 survey, M108, T101, T420, 507, 889
 survival, M230
 survival analysis, 471
 survival rate, 662
 sustainability, 319, 657
 sward height, T129
 sward target, T125, T126, T128, T132, T133
 sweet, 177
 sweet potato flour, W75
 sweet taste receptor, T203
 sweeteners, T76
 swine, M202, M218, T68, T183, T187, T205, W194, W199, 11, 92, 179, 304, 334, 335, 357, 442, 443, 444, 512, 513, 591, 599, 641, 646, 647, 651, 653, 655, 753, 757, 761, 842, 846
 Swiss cheese, W68
 Swiss-type cheese stretchability, 723
 synbiotics, T55
 synchronization, 583
 synthetic vitamin E, T313
 systems biology, M249, M258, 673
 systems model, 572

T
 tall fescue, M130, M131, W124
 tallow levels, 571
 tannin, M118, M120, M125, M126, M127, T356, T363, W294, W295, W296, W297, W387, W403, 20
 tannin extracts, M375, M376
 target weight, 535
 taste, W89
 teaching, 344, 801, 889, 890, 892, 896
 teaching and learning, 800
 teaching and outreach, 342
 teat, M34
 technology, 45, 344
 temperament, M7, M16, M20, T296, W161, W256, 341, 460, 537, 546, 772
 temperature, T116, W12, 87, 325, 785
 temperature monitoring, 161
 temperature-humidity index, M270, M279
 tenascin XB gene, 689
 tenderness, W161, W171, W175, W180, 322, 481, 523, 524, 636, 858
 TER, W3

terminal sire, 584
 terpenes, M124
 test, 152
 test-day milk yield, M33
 test-day model, 882
 testes, W242
 tetra-basic zinc, 417
 texture, M99, W71, 725
 texture properties, M153
 TG, T43
 theca cells, 233
 thermal stability, M274
 thermodynamics, 293
 thiazolidinedione, W233, 400
 305ME, W266
 3K, 329
 threonine biomass, T178
 threshold, M279
 tight junction, M196
 tillage methods, 225
 tiller, M134
 tillering, T133, T135
 time, W12
 time access, T339
 time eating, 627
 timed AI, M259, W227, W232
 timed artificial insemination, W422, W423
 timing of AI, T240
 tissues, T419
 titer, W184
 TLR4, T7
 TMR, 880
 TMR mixer, 231
 TNF- α , W225
 topdress, W289
 total fiber number, 745
 total mixed ration, M283, M352, 576, 882
 total phosphorus, W268
 toxicology, T416
 TPA, 606
 trace mineral, M251, M335, T294, W214,
 172, 413, 554
 trace mineral source, 417
 traceability, T98, T99, T268, 97
 traditional Chinese medicine, T251
 training, T402
trans fatty acid, M365, 230
trans stereoisomer, W177
 transcription factor, 148, 740
 transcription factor SP1/SP3, T3
 transcriptomics, T343
 transfer efficiency, M194
 transglutaminase, 63
 transition, M414, W394, 877
 transition cow, M3, M249, M258, M324,
 M365, W233, W361, 73, 80, 230, 423,
 427, 779, 821, 872
 transition cow success, 110
 transition cows, W336, W377, 871
 transition diet, T327, W341, W395
 transition period, 77, 391, 672, 878
 transmission, M51
 transport, T390, 180, 304, 455, 464, 538,
 540, 736
 transportation, M23
 Trappist cheese, W88
 trenbolone, T404
 trenbolone acetate, 284
Treponema, 541
 T-RFLP, 92
 tri-basic copper, 417
 tribasic copper chloride, 98
Tribolium castaneum, 476
 triticale dried distiller grains, M305
 triticale dried distillers grains with solubles,
 T376
 tropical, T169, T170
 tropical adaptation, T22
 tropical corn, W96
 tropical dairy cattle, 475
 tropical forage, T134, T135
 tropical grass, M138, W93
 tropical grasses, W95, W385, W392, 559
 tropical pasture, M302
 tropics, M343
Trypanosoma vivax, W411, 688
 tryptophan, T188, 391, 392
 tulathromycin, W15
 tumor necrosis factor alpha, W233
 turkey, T48
 turmeric, M244
 turnover, W304, 780
 TVA hydrogenating bacteria, T342
 TVC, 606
 twinning, 276, 470
 tylosin phosphate, 761
 type traits, 710
 TZD, M303

U
 udder uptake, 835
 UHT, 210
 UHT dairy products, T73
 UHT milk, M90
 UHT milk proteolysis, M86
 ulcer, 624
 ultrafiltration, 727, 827
 ultrafiltration flux, 201
 ultra-high temperature, 213
 ultrasound, T146, W29, W162, 754
 ultraviolet light, T93
 umami, 177
 umami taste receptors, T202
 unconsciousness, 10
 undergraduate, T423, T424, 887, 888
 undergraduate education, 345, 800
 under-nourishment, M411
 undernutrition, W136
 underrepresented minorities, T422
 unwanted horses, T151
 upland cottonseed, W364
 urea, M101, M293, M333, W245
 urea flux, T66, T67
 urea kinetics, M394
 urea recycling, 72
 urea-N¹⁵, M388
 urease, M389
 urinary nitrogen, 284
 urinary nitrogen excretion, 787
 urine, W304
 US Holstein, W52, 709
 uterine blood flow, T211
 uterine disease, T244
 uterine health, 704
 uterine pH, W226
 uterus, W138, 3
 UV light, 498

V
 vaccine, M53, 554
 vacuum packaging, M91
 validation, M1, 333
 value-added, M108
 values-based communications, 801
 valves, 493
 variance components, W34
 variation, M44, M74
 vascular, 381
 vascular hemodynamics, 287
 vasoconstriction, M130
 veal, W311
 veal calves, W309
 vegetable reconstituted fat, 844
 vegetable soup, T81
 vegetarianism, 356
Vernonia amygdalina leaf extract, 594
 vertical transmission, 189
 veterinarian, 350
 veterinary, M103, 505
 veterinary medicine, T422
 VFA, M240
Vicia panonica, M420
 video image, W172
 viscosity, W84
 viscous dietary fibers, T56
 visual assessment, 310
 visualization, 198
 vitality, 817
 vitamin B₆, W202
 vitamin B₁₂, W314
 vitamin C, 288
 vitamin D, M58, M95, 744
 vitamin D receptor, W19
 vitamin E, M57, T23, 322, 640
 vitamin premix, T16
 vitamins, 144, 172
 vitrification, 652
 VNTR, T39
 VOC emissions, W273
 volatile compounds, T150, 585, 603
 volatile fatty acids, 623, 777
 volatile organic compounds, W109, W343,
 408

W

W/O/W, W79, W80
Wagyu, M181
warm-season grass, W104
waste, T153
waste milk, M39
water, 679
water buffalo, T173
water consumption, W188
water intake, 161, 294
water total dissolved solids, M273
water treatment, 857
waxy corn silage, 82
WDGS, 119
weaned lambs, M398
weaned pig, M226, W189, 255, 256
weaning, M307, M309, M371, T203, T290,
T397, W39, W199, W264, W271, 259,
262, 328, 385, 462, 581
weaning age, M59
weaning methods, M17
weather, T137
Weibull distribution, T295
weigh-suckle-weigh, T264
weight, T145
weight and size, M104
weight gain, W260, 630
weight gain and carcass variables, M399
weight loss, M80
welfare, M21, M25, M370, 312, 348, 351,
452
welfare assessment, 315
well-being, 656
West African Dwarf ewe, 439, 586, 678, 682
West African Dwarf lambs, 435
West African Dwarf sheep, T383
wet corn distillers grains, 283
wet distillers grains plus solubles, 117
wetting, M275

wheat bran, T283, W193, 118
wheat DDGS, M377, W252, W283, W288
wheat dextrin, M217
wheat distillers, M409
wheat dried distiller grains, M306
wheat dried distillers grains with solubles,
M157
wheat factory sewage, W329
wheat grain, M378
wheat millrun, 96
wheat silage, T262
wheat straw, M189, W124, W371, 867
whey, M142, M143, M144, M145, M146,
202
whey bleaching, 201
whey powder, 726
whey probiotic beverage, 503
whey protein, M92, T96, 68, 380, 823
whey protein nanoparticles, 822
White Dorper, 690
whole cottonseed, T302
whole genome, W55
whole milk, 139
Wilmink function, M75
winter, M273
winter cereals, W90
winter forage, T142
winter grazing, 560
WNT, M250
Wnt LRP6, T8
wool, 676
WPC80, 67
writing, 240

X

xylanase, T331, W119, 94, 96, 218, 448
xylose, 217

Y

Y chromosome, W23
yearling steers, 119
yeast, M360, T123, T289, W101, W117,
W300, W301, 296, 580, 876
yeast culture, M38, M45, M55, W359, 438,
574
yeast nucleotides, W3, 593
yellow grease, 132
yield, M148
yogurt, M153, T80, T91, W75, W76, W83,
W85, 608, 610, 611
yogurt texture, 609
Yorkshire, T266
young beef cows, W257
young bulls, W176, W177
youth, T155, 515
youth education, M115
yucca extract, M213
Yucca schidigera, 854

Z

Zandi sheep, W48, W50
zearalenone, W183, W184
Zebu, W30, W31, W32, W299
Zel sheep, T47, W51
zeolite, M417
zeranol, T405, W408, W417
zero tannin faba beans, M200
zeta potential, M87
zilpaterol, M298, M400, 285, 555
zilpaterol hydrochloride, M58, M219, W133,
521
zinc, W204
zoonosis, T111