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LIST OF BULLETINS OF THE AGRICULTURAL EXPERIMENT STATIONS IN THE UNITED STATES FROM THEIR ESTABLISHMENT TO THE END OF 1920

PREPARED IN THE OFFICE OF EXPERIMENT STATIONS
ADDRESS LIST OF AGRICULTURAL EXPERIMENT STATIONS.

ALABAMA.—Auburn, M. J. Funchess, 1 Director.
ALASKA.—Sitka, C. C. Georgeson, Agronomist in charge.
ARIZONA.—Tucson, J. J. Thornber, Acting Director.
ARKANSAS.—Fayetteville, Dan T. Gray, Director.
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WEST VIRGINIA.—Morgantown, H. G. Knight, Director.
WISCONSIN.—Madison, H. L. Russell, Director.
WYOMING.—Laramie, J. A. Hill, Director.

1 Acting director.
This bulletin lists approximately 12,500 of the 17,500 or more publications of the State experiment stations (including those of Alaska and the insular possessions) from 1875 to 1920, inclusive. It is confined primarily to the regular bulletin series of the stations. It does not include circulars and other more or less ephemeral publications; annual reports, except such as are numbered as bulletins; nor scientific contributions from the stations which have appeared in the Journal of Agricultural Research or other scientific periodicals.

The work of preparing the list has been done at intervals of several years and by a number of different persons, but mainly by Miss E. Lucy Ogden, former librarian of the States Relations Service, and Miss Martha L. Gericke, present librarian of the Office of Experiment Stations.

ALABAMA.
Agricultural Experiment Station of the Alabama Polytechnic Institute, Auburn.

BULLETINS (FIRST SERIES), 1883-1885.
5. Report on the phosphates of Alabama. By W. C. Stubbs [E. A. Smith and W. L. Broun, jr.].—Agricultural and economic value of these phosphatic deposits. 1884. Published as a bulletin of the State Department of Agriculture.
7. [Commercial fertilizers: experiments, analyses, etc.] By J. S. Newman. 1885. Published as a bulletin of the Alabama State Department of Agriculture.
8. “The boll worm” (Heliotis armigera Huebner) and “The cotton worm” (Aleia argillacea Huebner, Aleia zyline Say). Mar., 1885. Published as a bulletin of the Alabama State Department of Agriculture.

BULLETINS (SECOND SERIES), 1885-1887.
1. The grape. By J. E. Saunders. Sept., 1885. Published as a bulletin of the Alabama State Department of Agriculture.
BULLETIN 1190, U. S. DEPARTMENT OF AGRICULTURE.


7. Improvement of soils, etc. By N. T. Lupton. Mar., 1886. Published as a bulletin of the Alabama State Department of Agriculture.

8. [Miscellaneous analyses.] By N. T. Lupton. Feb., 1887. Published as a bulletin of the Alabama State Department of Agriculture.

BULLETINS FOR 1887.


5. Experiments with sweet potatoes and sugar cane, 1876 [i.e., 1886]. By J. S. Newman. July 15, 1887.


BULLETINS FOR 1888.


4. [Experiments with fertilizers for cotton; relation of different parts of the hog to the whole dressed weight.] Apr., 1888.


BULLETINS (NEW SERIES).

After being dropped and resumed from time to time, the designation of "new series" was finally abandoned beginning with No. 27.


4. Straddle grape; culture and pruning; raspberries; and prunings. By J. S. Newman. Feb., 1889.


10. Grape culture. By J. S. Newman. Jan., 1890. Not to be confused with Bul. 10 of the Alabama State Department of Agriculture, July, 1896, the cover of which bears also the name of the Agricultural Experiment Station.


15. Insecticides: Kerosene emulsion, how to make and apply it. By G. F. Atkinson. Apr., 1890.


34. Cooperative soil-test experiments for 1891. Jan., 1892.
Experiments in corn, orchard grapes, strawberries, cotton, peanuts, orchard trees, meat cooperatives. 


The San Jose scale—a warning to the fruit growers of Alabama; some other insect pests; the tomato worm; grape leaf-hoppers; cabbage worms. By C. F. Baker. Jan., 1897.


Corn, cowpeas, and wheat bran for fattening pigs. By J. F. Duggar. May, 1897.


More about the San Jose scale; a sweet potato pest; regarding carbon bisulphid, insecticides and pumps in general. By C. F. Baker. Aug., 1897.


The peach tree borer; the fruit bark beetle. By C. F. Baker. Jan., 1898.

Cooperative fertilizer experiments with cotton in 1897. By J. F. Duggar. Feb., 1898.


Peanuts, cowpeas, and sweet potatoes as food for pigs. By J. F. Duggar. Apr., 1898.


120. The cowpea and the velvet bean as fertilizers. By J. F. Duggar. Apr., 1902.
124. The agricultural law; notes on some of the insects and fungus diseases affecting agricultural crops
By R. S. Mackintosh. May, 1903.
June, 1904.
Feb., 1905.
Apr., 1905.
138. Variety tests with cotton and corn; Williamson method of corn culture. By J. F. Duggar and L. N.
143. Preparation and application of the cottonseed meal for southern pork production. By D. T. Gray, J. F. Duggar, and
148. Raising lambs in Alabama: Maintenance rations for ewes; feeding cottonseed meal to pregnant ewes.
Feb., 1911.
Feb., 1911.
Sept., 1913.
27. [Monthly rainfall as recorded at the station for a period of nine years.—Agricultural value of nitrogenous materials for cotton on the Honouliuli district, as determined by field trials; residual effect of cover crops; alfalfa—yields, and effect as a means of restoring fertility] By F. D. Stevens. Jan., 1910.

ALASKA.

Alaska Agricultural Experiment Stations, Sitka, Kodiak, Rampart and Fairbanks:

BULLETINS.


ARIZONA.

Agricultural Experiment Station of the University of Arizona, Tucson:

BULLETINS.

1. Arizona Agricultural Experiment Station. By F. A. Gulley. Dec., 1890.
2. I. Notes on some of the range grasses of Arizona; II, overstocking the range. By J. W. Toumey. Sept., 1891.
13. The mesquite tree, its products and uses. By R. H. Forbes. Mar., 1894 [i.e. 1895].
19. Sixth annual report. 1895.
42. The cool side of a house in Arizona. By S. N. Woodward. June, 1892.
45. Timely hints for farmers [Nos. 35-41]. Nov., 1902.
51. Timely hints for farmers [Nos. 48-54]. June, 1905.

1 Reports of agricultural investigations in Alaska, 1897-1900, were published as Office of Experiment Station Bulletins 45, 62, 82, 94. For other accounts of investigational work see the annual reports of the station.
73. Alfalfa in the Southwest. By G. F. Freeman. June 1, 1914.
75. Papaloa sweet corn, a new variety. By G. F. Freeman. May 1, 1915.

ARKANSAS.

Arkansas Agricultural Experiment Station, Fayetteville.

BULLETINS.

1. [Announcement of lines of work of the Station. By A. E. Menke.—Experiments on cotton and corn in Drew County. By F. M. Bordeaux [and A. E. Menke]. [1887].
2. Diseases of animals. Apr., 1888.
15. Some new insecticides and their effect on cotton worms. [By G. C. Davis.] Dec., 1890.
22. Sorghum and sugar-cane culture; syrup and sugar making on small farms; some field experiments with cantaloupes and corn. By C. L. Newman. Dec., 1892.


27. Agriculture, experiments at the Northeast Station: Late crops for overflow lands; corn varieties for all sections of the State; corn culture; rotation of crops; cotton; Egyptian varieties; cotton culture; some for early forage for curing and storing corn hay; cowpea hay; forage plants; oats for hay. By R. L. Bennett and G. B. Irby. Mar., 1894.

28. Agriculture, experiments at the Southern Branch Station: Rye for green winter feeding; fertilizer experiments with rye; onions from seed; salsify, or oyster plant; fall raised Irish potatoes; preparation of cotton, corn, and grass; pockmarked potatoes, June, 1894.


55. Supplementary circular: Pork and beef as money crops for cotton farmers, also crops for improving soils for succeeding crops of cotton. By R. L. Bennett. [n. d.]


60. The comparative yield of corn from seed of the same variety grown in different latitudes. By C. L. Newman. Dec., 1899.


62. An analysis of cotton seed, for summer hay and pasture, for winter feed and pasture, and for forage or coarse fodder; permanent plants for meadow pastures; special crops for pig grazing. By R. L. Bennett. July, 1900.


69. Soil improvement and forage experiments. By R. L. Bennett. 1901.

70. Squash-smoker experiments. By Ernest Walker. 1901.


74. The phosphate rocks of Arkansas. By J. C. Branner and J. F. Newsom. 1902.


76. Pig feeding experiments with cottonseed meal. By R. R. Dinwiddie. 1903.


86. Asparagus and salt; asparagus growing in Arkansas; thurb in Arkansas. By Ernest Walker.—Fertilizers registered for sale in Arkansas during 1905. By A. M. Muckenfuss. 1905.

ARKANSAS.

Corn

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BULLETIN

10. Tick eradication laws. By R. C. Knox.—Regulations of the board of control, with notes on these
laws and regulations. By R. M. Gow. 1895.


CALIFORNIA.

Agricultural Experiment Station of the University of California, Berkeley.

BULLETINS.

1. Examination of the water of the San Fernando tunnel, Los Angeles County. By E. W. Hilgard. [Jan., 1884.]


17. The muscat grape on the southern mesas. By E. W. Hilgard. [Sept., 1884.]


21. Examination of red wines from Santa Clara and Napa Counties. [1884.]


25. Examinations of Alameda County vineyard soils. By E. W. Hilgard. [1884?]


27. Examinations of soils from the Northern Coast Range Region. By E. W. Hilgard. Dec., 1884.

28. Examinations of tule, marsh, and alkali soils. By E. W. Hilgard. [1884?]


30. Concerning species sent for examination; examinations of various upland soils. [1884?]


39. Analyses of oranges and lemons from the Riverside citrus fair, Mar., 1885, [i.e. 1886]. By E. W. Hilgard. May, 1885.

40. [Investigations of wines from rare grape varieties.] By E. W. Hilgard. May, 1885.


44. The "bed-rock lands" of Sacramento County. By E. W. Hilgard. Oct., 1885.


47. Seed distribution. By E. W. Hilgard. [1886?]


56. Experiments with selected wines, the sulphuric acid and E. W. Hilgard. May, 1886.


64. Experiments with acid resistant wines. By E. W. Hilgard. Feb., 1887.

70. Abnormal deposits on wine leaves; mysterious death of vines; remedy for the anthracnose of vines. By E. W. Hilgard. June, 1887.
73. The use of hydrocyanic acid against scale insects. By F. W. Morse. Aug., 1887.
74. Vintage work and instruction in the viticultural laboratory, 1887; the choice of resistant stocks. By E. W. Hilgard. Aug., 1887.
86. Preservation fluids for fresh fruits; the sulphuring of dried fruits. By E. W. Hilgard. May, 1890.
89. Distribution of seeds and plants. By E. J. Wickson. Dec., 1890.
91. Port and sherry grapes in California; importation of Italian grapes; importation of olives. By E. W. Hilgard. Feb., 1891.
97. Investigation of California prunes, apricots, and peaches. By G. E. Colby. [1892?].
135. The potato worm in California (Gelechis opercula (Zeller)). By W. T. C. Clarke. Oct., 1901.
169. Field observations upon the tolerance of the sugar beet for alkali. By G. W. Shaw. May, 1905.
211. How to increase the yield of wheat in California. By G. W. Shaw. Feb., 1911.


The red or orange scale. By H. J. Quayle. July, 1911.


The control of the lima bean; the need and possibility of its improvement. By G. W. Shaw and M. E. Sherwin. Nov., 1911.


The purple scale. By H. J. Quayle, 1912.

Grape vinegar. By F. T. Bioletti. 1912. See also 228.

New control methods for the pear thrips and peach tree borer. By E. L. Morris. 1912.


Three years' work of the Ferndale ( Humboldt County) cow-testing association. By LeRoy Anderson. Sept., 1912.


The selective improvement of the lima bean. By G. W. Shaw. May, 1913.


Cockroaches of Florida and Cuba compared with those of California. By H. S. Fawcett. 1915.


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INDEXES.

COLORADO.
Agricultural Experiment Station, Fort Collins.

BULLETINS.

1 A summary of these investigations was first published in Jour. Indus. Engin. Chem., 7 (1915), No. 12, p. 1088-1041.
20. I, and some notes on the practical use of the farmer and dairyman; II, the influence of food upon the pure fat present in milk. By W. J. Quick. Aug., 1892.
33. Seasonal or return waters from irrigation. By L. G. Carpenter. Jan., 1896. See also 180.
38. Sheep seas; a few insect enemies of the orchard. By C. P. Gillette. Apr., 1897.
43. I, Notes on Colorado; II, Notes on Deltodochalys and Athysanus from Colorado; III, a list of original types, etc., in collection. By C. P. Gillette. Mar., 1898. (Tech. Bul. 3.)
45. The loss of water from reservoirs by seepage and evaporation. By L. G. Carpenter. May, 1898.
49. Loss from crops from irrigation or seepage; by L. G. Carpenter and R. E. Trimble. Sept., 1898.
71. Insects and insecticides. By C. P. Gillette. Apr., 1902. A revision of 47. See also 114.
77. The tomato industry of the Arkansas Valley. By H. H. Griffin. Feb., 1903.


INFORMATION BULLETIN.


SEED LABORATORY BULLETINS.


V. I. Nos. 5-6, listed in the third annual report of the Colorado Seed Laboratory (v. 2, No. 2) were not issued.

V. II. No. 1. Not issued.


BULLETINS, TECHNICAL SERIES.

Bulletins 31, 37, 43, 44, 56, and 94 of the regular series are also designated Technical Bulletins Nos. 1, 2, 3, 4, 5, and 6, respectively.

INDEXES.

Index to Bulletins 1-17 (See Bulletin 15).


CONNECTICUT.

The Connecticut Agricultural Experiment Station, New Haven.1

BULLETINS.

With the exception of Bulletins 4, 19, 20, the first of 67 numbers are mimeographed or printed slips for the use of the agricultural press.


1 For accounts of work done at Middletown prior to the establishment of the station at New Haven, see the following reports: Preliminary report, May 1, 1876.—First annual report for 1876.—Report of work, 1877-78, with an account of field experiments with fertilizers.
22. Fertilizer analyses. By S. W. Johnson. [Apr. 5, 1879].
27. Fertilizer analyses. By S. W. Johnson. May 23, 1879.
41. Fertilizer analyses. By S. W. Johnson. May 1, 1880.
42. Fertilizer analyses. By S. W. Johnson. May 8, 1880.
44. [Fertilizer analyses.] By S. W. Johnson. June 12, 1880.
47. Fertilizer analyses. By S. W. Johnson. Sept. 21, 1880.
51. Fertilizer analyses; sorghum seed; kiln-dried brewer's grains; Paris green on cornstalks. By S. W. Johnson. Jan. 27, 1881.
53. The bird guano and fertilizer; apple pomace as a fertilizer; apple pomace as cattle food. By S. W. Johnson. Feb. 16, 1881.
54. [L. e. 54.] Ashes from factories in Canada; Quinipiack coarse bone. By S. W. Johnson. Mar. 30, 1881.
57. Fertilizer analyses. By S. W. Johnson. Apr. 21, 1881.
58. Fertilizer analyses; trade values for 1881. By S. W. Johnson. Apr. 28, 1881.
60. An act concerning commercial fertilizers; fertilizer analyses. May 12, 1881.
64. Fertilizer analyses. By S. W. Johnson. June 17, 1881.
70. Fertilizer analyses. June 30, 1882.
72. Fertilizer law; location of the experiment station; fertilizer analyses. By S. W. Johnson. Aug. 25, 1882.
73. An act concerning commercial fertilizers; observance of the fertilizer law; fertilizer analyses; trade values for 1883. Apr. 1883.
74. [Analyses of fertilizers.] By S. W. Johnson. May 1, 1883.
75. Observance of the fertilizer law; fertilizer analyses. June 11, 1883.
76. Observance of the fertilizer law; fertilizer analyses. July 30, 1883.
77. Trade values of fertilizing ingredients in raw material and chemicals for 1884; fertilizer analyses; analyses of the ash of healthy and diseased peach wood. By S. W. Johnson. Apr. 1884.
78. Explanations concerning the analysis of fertilizers and the valuation of their active ingredients; fertilizer analyses; the Connecticut law. By S. W. Johnson. May 1884.
79. Observance of the fertilizer law; fertilizer analyses. July, 1884.
80. Observance of the fertilizer law; fertilizer analyses; trade values. By S. W. Johnson. Sept., 1884.
82. [Fertilizers.] By S. W. Johnson. Mar., 1885.
83. [Fertilizers.] Apr., 1885.
84. [Fertilizers.] June, 1885.
86. To manufacturers and dealers in commercial fertilizers in Connecticut; fertilizer analyses; fodder 25, 1886.
87. Valuation of fertilizers; fertilizer analyses; analysis of Florida oranges; fodder analyses. Mar., 1886.
88. Gratutious analysis of commercial fertilizers; instructions for sampling commercial fertilizers; observance of the fertilizer law; trade values; fertilizer analyses. July, 1886.
89. Analyses of superphosphates and special manures. Oct., 1886.
90. Valuation of fertilizers; fertilizer analyses. By S. W. Johnson. Mar., 1887.
91. Notice concerning samples of grasses; fertilizer analyses. By S. W. Johnson. Apr., 1887.
92. [Fertilizers: Observance of the law; analyses.] Sept., 1887.
93. [List of grasses and forage plants in the station garden.] Nov., 1887.
94. [Fertilizers: Trade values and analyses.] Apr., 1889.
95. [Fertilizers: Trade values and analyses; observation of the law.] June, 1889.
96. On the fertilization of feeding stuffs; analyses of feeding stuffs; the average composition of feeds for dairy
100. Analysis of sylvant; analyses of unbleached wood ashes; analyses and valuations of commercial mixed
fertilizers. Sept., 1889.
101. [Fertilizer analyses.] Jan., 1890.
103. Fertilizers. May, 1890.
105. Notice as to supply of station reports: corrections.—The potato scab. By Roland Thaxter.—The
proteids of the oat kernel. By T. B. Osborne.—Milk testing. Dec., 1890.
106. The method of determining fat in milk and cream for the use of creameries; analyses of butter
from exhibit at the dairymen's meeting; fertilizers. Mar., 1891. See also 117.
108. Examination of the seed of orchard grass; ash analysis of white globe onions; on the determination of
fat in cream by the Babcock method. May, 1891.
110. Notice as to supply of station reports; Canada ashes; a request for samples of Indian corn; correction.
By S. W. Johnson. Dec., 1891.
111. Notice as to bulletins [and] reports.—Common fungous diseases and methods of treatment. By W. C.
Sturgis. Mar., 1892. See also 115.
112. On the Gunning-Kjeidahl method and a modification applicable in the presence of nitrates. By
113. Notice as to bulletins [and] reports, fertilizers. Sept., 1892.
114. Notice as to bulletins, fertilizers. Dec., 1892.
116. The Connecticut fertilizer law; acts concerning Connecticut fertilizers; cottonseed meal as a fertilizer
118. A provisional bibliography of the more important works published by the U. S. Department of Agri-
culture and the agricultural experiment stations of the United States from 1856 to 1893, inclusive, on fungous and
119. The Babcock test as a basis for payment in cream-gathering creameries. By A. L. Winton and A. W.
Ogden. May, 1894.
120. Analyses of fertilizers; trade values of fertilizer ingredients for 1895; poultry foods. By E. H. Jenkins.
Apr., 1895.
121. The elm leaf beetle,—The San José scale. By W. C. Sturgis and W. E. Britton.—Trade values of fertilizer
122. Cost of nitrogen, phosphoric acid, and potash in Connecticut, spring months of 1896.—The proper use of
127. The cost of plant food in Connecticut, spring months of 1898. May, 1898.
131. The proper handling of shade trees in towns and cities. [By E. H. Jenkins and others.] Nov., 1900.
See also 163.
135. Preliminary experiments in spraying to kill the San José scale insect, season of 1901. By W. E. Britton.
Feb., 1902.
See also 177.
139. The white fly or plant-house aleyrodas, Aleyrodes vaporariorum Westw? By W. E. Britton. Sept.,
1902.
142. Two common scale insects of the orchard: The seury bark louse, Chionaspis furfur, Fitch; the oyster


169. The leopard moth, Zeuzera pyrina Linn. (=scutell Linn.). Nov., 1911.


172. The net weight or volume of food products which are sold in packages. By J. P. Street. July., 1912


206. Report on commercial feeding stuffs. 1917. By E. M. Bailey. —[Index, title page and table of contents to forty-first annual report of the Connecticut Agricultural Experiment Station ... for ... 1917-18, and reports of board of control and treasurer.] Feb., 1918.


BULLETIN 1189, U. S. DEPARTMENT OF AGRICULTURE.

Storrs Agricultural Experiment Station, Storrs.

BULLETS.


22. The soy bean as a forage and seed crop. By C. S. Phelps. Apr., 1901.


37. The so-called "germinal property" of milk. By W. A. Stocking, Jr. June, 1905.


42. Quality of milk affected by common dairy practices. By W. A. Stocking, Jr. June, 1906.


46. Directions for making the Camembert type of cheese. By T. Issajoff. Feb., 1907.


70. Silage fermentation. II. By W. M. Esten and C. J. Mason. Jan., 1912.


Infectious Bacillary Cattle Injuries


75. The bacteriology of the hen's egg, with special reference to its freedom from microbial invasion. By L. F. Rettger, Nov., 1913.


An electric incubator for bacteriological work. By W. M. Esten. Sept., 1915.


Connecticut (Storrs) — Delaware.

The Delaware College Agricultural Experiment Station, Newark.

BULLETINS.


8. Studies of the development of the domestic sugar industry; the value of sulphite of potassium as a remedy against pear scab; London purple as a remedy against the codling moth. By M. H. Beckwith. Mar., 1900.


Abstract

Can I, Alfalfa, Three Directions

Soil Anthrax: Combating Strawberries: Home-made Pear

Some The Crimson

The Sundry Top-working

Veterinary

SanJose scale in Delaware. By M. H. Beckwith. May, 1895.

Abstract from annual report 1894. Mar., 1895.


Strawberries: Test of varieties; varieties grown in Delaware; injury from leaf blight and strawberry weevil. By M. H. Beckwith. July, 1895.


The San Jose scale insect; present status of the San Jose scale in Delaware; status of the insect in the United States. By M. H. Beckwith. Jan., 1896.

Milk sampling. By C. L. Penny. 1896.


The increase of the San Jose scale in Delaware during 1896. By G. H. Powell. 1896.


The cherry in Delaware. By G. H. Powell. 1897.

Potash: its commercial relations; its agricultural relations; chemical method for its accurate estimation in soil. By C. L. Penny. 1897.


Some principles in Delaware apple culture. By G. H. Powell. 1898.


Common diseases of the fruits, their control and treatment. By F. D. Chester. Sept., 1900.


The strawberry root louse; the destructive pea louse in Delaware. By E. D. Sanderson. Dec., 1900.


Pear blight and pear canker. By F. D. Chester. Apr., 1901.

Three orchard pests: The apple-bud borer; the fruit-tree bark borer; the periodical deoda. By E. D. Sanderson. Dec., 1901.


Some destructive caterpillars: The fall web-worm; the white-marked tussock moth; the apple-tree caterpillar. By E. D. Sanderson. June, 1902.


The San Jose scale. By E. D. Sanderson. Feb., 1903.

The codling moth. By E. D. Sanderson. Feb., 1903.


Orchard cover crops in Delaware. By C. P. Close. June, 1903.

Pruning the peach. By C. P. Close. Feb., 1904.


Some experiences with the lime, sulphur, and salt washes; two common scale insects. By C. O. Houghton. Mar., 1904.


A study of Delaware seed corn. By Harry Hayward and H. S. Jackson. Apr., 1907.


Annual report of the director for the year ending June 30, 1907. [By Harry Hayward.] Jan., 1908.


Report on forest conditions in Delaware and a forest policy for the State. By W. D. Sterrett. Dec., 1908.


Annual report of the director for the year ending June 30, 1908. [By Harry Hayward.] Jan., 1909.

Spraying for the brown rot of the peach, 1908. By C. A. McCue. May, 1909.

DELAWARE—FLORIDA.

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91. The relation of parasitic fungi to the contents of the cells of the host plants: I. The toxicity of tannin.
93. The double blossom of the dewberry (Fusarium rubi Winter). By M. T. Cook. Apr. 1, 1911.
95. Top dressing grass lands; the sowing of red clover. By A. E. Grantham. Apr. 1, 1912.
97. The relation of parasitic fungi to the contents of the cells of the host plants: II. The toxicity of vegetable
100. Annual report of the director for the fiscal year ending June 30, 1912. By Harry Hayward. May 15, 1913.
102. Fruit juices. By Firman Thompson and A. C. Whittier. May 1, 1913.
108. Some new bacterial diseases of legumes and the relationship of the organisms causing the same. By
   T. F. Manns. Apr., 1915.
115. A preliminary report on mucic humus as a fertilizer and carrier of beneficial soil bacteria. By T. F.
120. Cover crops in the peach orchard. By C. A. McCue. Aug. 1, 1918.
121. Wheat investigations; Varieties. By A. E. Grantham. May 1, 1918.
122. Annual report of the director of the fiscal year ending June 30, 1918. [By Harry Hayward.] Nov. 1, 1918.

SPECIAL BULLETINS.

B. Spray calendar. Apr., 1895.

FLORIDA.

Agricultural Experiment Station of Florida, Gainesville.

BULLETINS.

1. [Report of experiments made by the agricultural section, gardening section, horticultural section.
   By J. N. Whitmer and J. Kest.] Apr., 1888.
2. [Report of experiments made by the several sections]. May–June, 1888.
3. Experiments with fertilizers; grasses; corn. Sept., 1888.
7. Corn experiment; cucumbers; constituents of mussk. By J. M. Pickell.—General characteristics of mussk.
8. Cotton experiment with long or black seed cotton; weeds of Florida. By J. C. Neal.—Annual report,
   Oct., 1890.
12. Tobacco. By H. J. Fenton.—Long or black seed cotton; foreign cotton; rice; sorghum. By J. P.
   DePass.—Ashe as a fertilizer. By J. M. Pickell.—Ash of pine straw. By J. J. Earle and J. P.
   value of raw finely powdered phosphate and of superphosphate as a fertilizer; a superphosphate from a low grade rock containing much aluminia; mussk. By J. M. Pickell and J. J.
   Earle. Apr., 1891.
18. Grasses; forage plants; tomato blight. By P. H. Rolfs. [July], 1892.
35. Cassava, the velvet bean, prickly comfrey, taro, Chinese yam, cassagne, alfalfa, flat pea, sachatine. By Oscar Clute. Apr., 1896.
40. The fall army worm; southern grass worm (Laphygma frugiperda Smith and Abbott). By A. L. Quaintance. July, 1897.
41. A fungus disease of the San José scale (Sphaerotheca coecophila Tul.). By P. H. Rolfs. Aug., 1897.
44. Cane; sirup; sugar. By H. E. Stockbridge. Jan., 1898. See 118.
90. Pig feeding with cassava and sweet potatoes. By C. M. Conner. Sept., 1907.
106. Scaly bark or "nailhead rust" of citrus (Cladosporium herbarum var. citricolum). By H. S. Fawcett. June, 1911.
137. Some cases of injury to citrus trees apparently induced by ground limestone. By B. F. Floyd. June, 1917.
145. Melanose, II. By H. E. Stevens. Feb., 1918.

GEORGIA.

Georgia Agricultural Experiment Station, Experiment.

BULLETS.

10. Fertilizer experiments on corn; culture experiments on corn; variety tests of corn. By R. J. Redding, Dec., 1890.  
11. Fertilizer experiments; culture experiments and variety tests in Cotton. [By R. J. Redding.—Sweet potatoes, field peas, garden vegetables, etc. By Gustave Speth.] Jan., 1891.  
12. Fertilizer experiments on vegetables. [By Gustave Speth.] Apr., 1891.  
15. I. Variety and fertilizer experiments with oats; II, variety tests with wheat. By R. J. Redding.—Fertilizer experiments on corn; variety tests of corn with vegetables. By Gustave Speth. Oct., 1891.  
15. I. Fertilizer experiments on corn; culture experiments on corn; variety tests of corn. [By R. J. Redding.—II. Culture of small fruits. By Gustave Speth. Dec., 1891.  
16. Fertilizer experiments on cotton; culture experiments on cotton; variety tests of cotton. [By R. J. Redding.] Feb., 1892.  
17. Irish potatoes; sweet potatoes; tomatoes; forage plants. By Gustave Speth. Mar., 1892.  
21. Fertilizer, culture, and variety experiments; Cora and cotton. [By R. J. Redding.] Feb., 1893.  
80. Cooperative dairy investigations by the Georgia Experiment Station and the Dairy Division, United States Department of Agriculture. By P. N. Flint and J. E. Dorman. July, 1908.  
90. Protein requirements of growing cattle under one year of age. By P. N. Flint. July, 1910.

BULLETINS (TECHNICAL SERIES)

This series includes Bulletins 81, 83, and 85 of the regular series.

HAWAII.

Hawaii Agricultural Experiment Station, Honolulu.

BULLETINS.

4. The cultivation of sisal in Hawaii. By F. E. Cooper. 1903.

GENERAL INDEX.

Index to publications of the Hawaii Agricultural Experiment Station July 1, 1901, to December 31, 1911. By A. T. Longley. May 24, 1912.

IDAHO.

Agricultural Experiment Station of the University of Idaho, Moscow.

BULLETINS.

10. Idaho agriculture, descriptive and experimental. By C. P. Fox. 1897.
26. I, Crude petroleum; II, the elm louse; III, the pear leaf blister mite. By J. M. Aldrich. Feb., 1901.
IDAHO.

43. Planting the apple orchard. By L. B. Judson. May, 1904. See 64.
I. Variations


37. Experiments with the muconaceous disease of the cucumber, and with the trap and barrier method for the destruction of that insect. By S. A. Forbes. Mar., 1895.

38. The Russian thistle and some plants that are mistaken for it. By G. P. Clinton. Apr., 1895.
40. Potatoes: Experiments of 1892-1894, with statement of some results obtained at other stations. By G. W. Mccluer.—Fungus diseases of the potato; an experiment to prevent scab and leaf blight of the potato. By G. P. Clinton. Apr., 1895.


44. Experiments with corn. By W. J. Fraser.—Attempts to grow crimson clover; on the improvement of retentive clays; drainage of the so-called "hard pan" lands of southern Illinois; on the importance of physiological requirements of the animal body; results of an attempt to grow cattle without coarse feed. By Eugene Davenport. Jan., 1897.


67. Other editions, Aug., 1902.


82. Dairy conditions and suggestions for their improvement. By W. J. Fraser, Feb., 1903.


100. The composition of silage. By W. J. Fraser, June, 1905.


128. Ten generations of corn breeding. By L. H. Smith. Sept., 1908. Appendix, p. 488-575, chiefly tables, was not included in all copies issued.


156. Insects injurious to stored grains and their ground products. By A. A. Grisult. July, 1912.


158. Relative economy, composition, and nutritive value of the various cuts of beef. By L. D. Hall and A. D. Emmett. July, 1912. Appendix, p. 200-203, consisting of tables, was not included in all copies issued.


BULLETIN 1199, U. S. DEPARTMENT OF AGRICULTURE.


SOIL REPORTS.


INDIANA.

Agricultural Experiment Station of Indiana, Lafayette.

BULLETINS.

38. 1, Small fruits; 2, treatment of powdery mildew and black rot; 3, vegetables. By James Troop. Mar., 1892.

* Bulletins of the experiment station properly begin with No. 13, previous numbers having been issued as bulletins of the Purdue University School of Agriculture prior to the organization of the experiment station under the Hatch Act.*
40. The silo and silage in Indiana. By C. S. Plumb. June, 1892.
41. I. Field experiments with wheat. By W. C. Latta.—2. Forms of nitrogen for wheat. By H. A.
42. Huston. Aug., 1892.
43. The potato: The relation of number of eyes on the seed tuber to the product. By J. C. Arthur. Nov.,
44. 1892.
46. 1891.
47. Dairy experiments. By C. S. Plumb. May, 1893.
49. 1893.
50. I, Does it pay to shelter milk cows in winter? 2, Upon skim milk as a food for calves. By C. S.
58. Horticultrue and entomology: a, Influence of climate on onions from seed; b, potato scab; c, Russian
59. apples in Indiana; d, protecting fruit from birds; e, the fruit bark-beetles. By James Troop. Dec.,
60. 1894.
64. Field experiments with wheat. By W. C. Latta and S. P. Carithers.—Potato scab and its prevention.
74. Field experiments with corn, oats, and forage plants. By W. C. Latta and W. B. Anderson. Apr.,
75. 1897.
82. I, Corn meal and shorts as food for pigs. By C. S. Plumb and W. B. Anderson.—II, Skim milk as
83. food for young growing chickens. By W. B. Anderson. June, 1898.
86. A native white bedding plant: The starry grasswort (Graustäm amanum colosspillum). By J. C.
90. Field experiments with corn and W. B. Anderson—Mangel wurzels and the cost of production.
92. 1899.
93. The San José and other scale insects, and the Indiana nursery inspection law. By James Troop.
94. May, 1899.
103. Dec., 1900.
115. Results of cooperative tests of varieties of corn, wheat, oats, soy beans and cow peas. By A. T. Wiancko. Feb., 1907. See 149.
158. Moisture control of butter: II. Conditions under control of the buttermaker; methods of moisture control factors, which influence the per cent of moisture found in butter after manufacture. By O. F. Hinziker, H. C. Mills, and George Spitzer. Nov., 1912.


IOWA.

Iowa Agricultural Experiment Station, Ames.

BULLETS.


37. Sugar beet investigations, 1897. By C. F. Curtiss and James Atkinson. 1898.

38. The Russian thistle. By L. H. Pammel. 1898. [A revision of 26.]


41. Some reports from trial stations on new orchard fruits and shrubs. By J. L. Budd. 1899.

42. Horse nettle as a troublesome weed in Iowa; two other troublesome weeds. By L. H. Pammel.—Potato scab. By C. R. Ball. 1899.

43. Some injurious scale insects. By Wilmon Newell. 1899.


45. Field experiments with corn, oats, barley, wheat, brome grass, rape, sorghum, soy beans, cowpeas, sugar beets, and sweet clover. By J. F. Kinser. Feb., 1900.


120. The cabbage root maggot in Iowa. By C. A. Scott. Feb., 1911.
154. Corn silage is an abstract of Bul. 183.


RESEARCH BULLETINS.


65. The type of lactic acid produced by starters and by the organisms isolated from them. By B. W. Hammer. Nov., 1920.

SOIL SURVEY REPORTS


INDEXES.


KANSAS.

Kansas Agricultural Experiment Station, Manhattan.

22. Summer experiments in 1891; test of fungicides to prevent loose smut of wheat; spraying to prevent wheat rust. W. A. Kellerman. Aug., 1891.
35. Actinomycosis bovis, or "lumpy jaw" of cattle; some observations upon loco. By N. S. Mayo. Dec., 1892.
46. Rusts of grain, II. By A. S. Hitchcock and M. A. Carleton. May, 1894.
84. Press bulletins, 3-4. June, 1899.


Report of work carried on jointly by the Kansas and Missouri stations.


TECHNICAL BULLETINS.


INDEXES.

Partial index to publications to April 1, 1900 [Bulletins 1-93, Press bulletins 1-63, Annual reports 1-12]. (In Kansas Sta. Bul. 91, p. 56-67.)

KENTUCKY.

Kentucky Agricultural Experiment Station, Lexington.

BULLETINS.


5. Analyses of feeding stuffs. By M. A. Scovell. [1887].


23. Experiments with oats; fertilizers on meadow land. Feb., 1890.


27. Experiments with commercial fertilizers on hemp. Apr., 1890.

28. Tobacco experiments. May, 1890.

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33. Corn experiments. Apr., 1891.
35. Experiments with wheat; experiments with oats. By M. A. Scovell and C. L. Curtis. Sept., 1891.
40. Some common pests of the farm and garden. By Harrison Garman. Mar., 1892.
42. Experiments with wheat; experiments with oats. Sept., 1892.
45. Field experiments with fertilizers: Corn; potatoes; tobacco; strawberries. 1893.
47. The pests of shade and ornamental trees; an experiment on plum rot. By Harrison Garman. Dec., 1893.
49. Destructive locusts in Kentucky; the bud worm of tobacco. By Harrison Garman. Mar., 1894.
50. Fruit growing in Kentucky; notes upon vegetables. By C. W. Mathews. Apr., 1894.
53. Spraying for codling moth; the use of arsenites on tobacco; the use of bisulphide of carbon and hydrocyanic-acid gas on low-growing plants. By Harrison Garman. Dec., 1894.
55. Field experiment with fertilizers. Apr., 1895.
57. Wheat experiments; oat experiments. Sept., 1895.
66. Tomato insects and R. J. Spurr.—Notes on tomato worms from observations made in 1896; notes on several tobacco insects and on two imperfectly known diseases of tobacco. By Harrison Garman. Feb., 1897.
67. The San José scale in Kentucky. By Harrison Garman. May, 1897.
68. Analyses of commercial fertilizers. By M. A. Scovell, A. M. Peter, and H. E. Curtis. May, 1897.
70. The woolly mullein; the gape disease of young poultry. By Harrison Garman. Dec., 1897.
77. Wheat: Test of varieties; test of fertilizers.—Notes and descriptions; red rust of wheat. By Harrison Garman. Sept., 1898.
80. Some pests likely to be disseminated from nurseries; the nursery inspection law. By Harrison Garman. Mar., 1899.
92. Grapes: By C. W. Mathews. April, 1901.


17-year locusts in Kentucky. By Harrison Garman. May, 1903.


Insects injurious to cabbages. By Harrison Garman. June, 1904.


On an injury to fruits by insects and birds; the apple-tree measuring worm; the Fall Beauty, and a new apple. By Harrison Garman. Dec., 1904.


The inspection of seeds under the Kentucky pure seed law. By Harrison Garman and M. L. Didlake. Sept., 1906.


Tobacco: Selection of seed in plants and care of seed; improved methods of handling the crop; elimination of undesirable varieties. By W. H. Scherffius. Feb., 1907.

The food of the crow blackbird; the corn root-worms. By Harrison Garman. June, 1907.


Information on food and drug inspection and investigation. By the Food and drug division. Nov. 20, 1909.


Seed testing apparatus. A study of conditions under which our germination tests are made. By Harrison Garman. May 22, 1910.


Blowing stumps with dynamite. By George Roberts. June, 1911.


The dipping of sheep for scabies in tobacco dips with and without the addition of flowers of sulphur. By E. S. Good and T. R. Bryant. Sept., 1911.


A preliminary study of Kentucky localities in which pellagra is prevalent, having reference to the condition of the corn crop and to the possible presence of an insect or other agent by which the disease spreads. By Harrison Garman. Jan, 15, 1912.


The cotton season. By Harrison Garman. Feb. 15, 1912.

Investigations of the stiologie of infectious abortion of cows and mares. By E. S. Good. Apr., 1912.


Forage poisoning or so-called cerebro-spinal meningitis in horses, cattle and mules. By Robert Graham. Sept., 1912.


173. The woody plants of Kentucky. By Harrison Garman. May 1, 1913.


175. The growing and fattening of hogs in the dry lot and on forage crops. By E. S. Good. Oct., 1913.


179. Composition equipment of dairy cows' milk. By C. W. Didlake.—The dairy barn at the Kentucky Agricultural Experiment Station. By J. J. Hooper. June, 1914.


190. The examination of the swine's dried grains in swine feeding operations; the value of wheat as a feed for swine. By E. S. Good and W. V. Smith. Jan., 1915.

191. The teachings of the Kentucky Agricultural Experiment Station relative to soil fertility. By George Roberts and J. H. Kastle. June, 1915.


227. Observations on the structure and coloration of the larval corn ear worm (Chloridea obsoleta), the bud worm (Chirola obsoleta) and a few other lepidopterous larvae. (Research bulletin.) By Harrison Garman. Mar., 1920.


**LOUISIANA.**

No. 1. Sugar Experiment Station, Audubon Park, New Orleans.  
No. 2. State Experiment Station, Baton Rouge.  
No. 3. North Louisiana Experiment Station, Calhoun.  
No. 4. Rice Experiment Station, Crowley.

**BULLETINS [FIRST SERIES].**

1. What has been done; what the station contemplates doing. By W. C. Stubbs. [n.d.]
2. [Fertilizers.] By W. C. Stubbs. [1886.]
3. [Summary of the work of the Sugar Experiment Station from its organization, Oct., 1885, to Apr., 1887.] By W. C. Stubbs. [1887.]
10. Sugar cane: Sugar house and laboratory experiments, 1886. By W. C. Stubbs. 1887
23. Sugar cane: Laboratory and sugarhouse results; diffusion process. By W. C. Stubbs. 1889.
27. Report of the North Louisiana Experiment Station for 1889. By J. G. Lee. [1890?]

**BULLETINS, SECOND SERIES.**

1. Analyses of commercial fertilizers and other substances useful to agriculture. By W. C. Stubbs. 1890.
2. Texas screw worm, Compsopus (Lucilia) macularia. By H. A. Morgan. 1890.
5. Sugar making on a small scale with results at the North Louisiana Experiment Station. By W. C. Stubbs. 1891. Reprint, with additions, 1895. Revised reprint, 1922.
6. Results of field experiments with sugar cane. By W. C. Stubbs. 1891.
7. Report of the State Experiment Station for 1890. 1891.
8. Results of 1890 obtained on the North Louisiana Experiment Station. By J. G. Lee. 1891.
9. Sugar cane: Laboratory and sugarhouse results of [Chilo saccharata] and its parasite. By H. A. Morgan. 1891.
10. Systematic feeding of work stock a preventive of disease and some of the diseases of farm animals. By W. H. Dalrymple. 1891.
16. Results of 1891 obtained on the North Louisiana Experiment Station. By J. G. Lee. 1892.
17. Results of 1891 obtained on the State Experiment Station. By D. N. Barrow. 1892.
18. Analyses of commercial fertilizers and other substances useful to agriculture. By W. C. Stubbs. 1892.
22. Results of the year 1892, [State Station]. By W. C. Stubbs [and others]. 1893.
31. Domestic and commercial fertilizers: Results of five years with our staple crops. By W. C. Stubbs. 1894.
32. Ramie (Boehmeria nivea). By W. C. Stubbs. 1895.
34. Cattle feeding, with results of trials. By W. C. Stubbs and D. N. Barrow. 1895.

*The designation "Second series" was dropped after Bul. 83.*
44. Charbon, or anthrax. By S. B. Staples and W. H. Dalrymple. 1896.
47. Analyses of experiments at State experiment station, Baton Rouge, La., in corn, cotton, forage crops, tobacco, etc. By D. N. Barrow. 1897.
71. Report [of North Louisiana Experiment Station]. 1901. By D. N. Barrow. 1902.
72. Forage crops, grasses, alfalfa, clovers, etc. By W. R. Dodson. 1902.
76. Analyses of commercial fertilizers and Paris green. By W. C. Stubbss—[Report covering seventeen years of work of the inspection of commercial fertilizers under the supervision of the Louisiana State Board of Agriculture and Immigration from 1886 to 1903.] By C. H. O'Rourke. 1903.
78. Comparative results of seedling sugar canes, D. 74 and D. 95 with our home sugar canes (Louisiana striped and Louisiana purple). By W. C. Stubbss and R. E. Boulin. [1904?]
81. Results of experiments in production and marketing fruits and vegetables, and canning fruits and vegetables on a small scale, at the North Louisiana Experiment Station, Calhoun, La. By D. N. Barrow and E. J. Watson. 1905.
82. The Texas fever cattle tick situation, and the eradication of the tick by a pasture rotation system. By H. A. Morgan. 1905.
83. Results of further experiment with nodule disease of the intestines of sheep: "Bare-lot" method of raising lambs. By W. H. Dalrymple. 1905.
90. Summary of results with vegetables and fruits at the North Louisiana Experiment Station from 1892 to 1907. By E. J. Watson. Jan., 1907.
91. The chemistry of the sugar cane and its products in Louisiana. By C. A. Browne, Jr., and R. E. Boulin. 1907.
92. Experiments in the late planting of cotton to avoid boll weevil damage during 1906. By C. W. Flynn, Jr. May, 1907.
55


95. Bare lot versus grass lot in relation to stomacal and intestinal parasitism of lambs—further experiments. By W. H. Dalrymple. Sept., 1907.


130. Lepelesana or Japan clover. By W. R. Dodson [and others]. Sept., 1911.


144. Suppression of the cottony cushion scale in Louisiana. By E. S. Tucker. Apr., 1914.


166. The deterioration of cane sugar by fungi. By Nicholas Kopeloff and Lilian Kopeloff. Feb., 1919.


SPECIAL BULLETIN.

The orange and other citrus fruits from seed to market, with insects beneficial and injurious, with remedies for the latter. By W. C. Stubbs and H. A. Morgan. 1893.

GEOLoGY AND AGRICuLTURE.

I. A preliminary report upon the hills of Louisiana north of the Vicksburg, Shreveport & Pacific Railroad. By O. Larch. 1892.

II. A preliminary report upon the hills of Louisiana south of the Vicksburg, Shreveport & Pacific Railroad. By O. Larch. 1893.

III. A preliminary report upon the Florida parishes of east Louisiana and the bluff, prairie, and hill lands of south Louisiana. By W. V. Clendenin and W. R. Dodson. [1896].


VI. A report on the geology of Louisiana, containing special papers by different authors. By G. D. Harris [and others]. 1902.

GEOLOGICAL SURVEY BULLETINS.8


4. Geology and underground water resources of northern Louisiana with notes on adjoining districts. By A. C. Veatch. 1906.


MAINE.

Maine Agricultural Experiment Station, Orono.

BULLETINS (FIRST SERIES).9


3. Analyses of wood ashes from various sources. [1885?]


17. [Analyses of clay shells; Bowker's fine ground bone]. By W. H. Jordan. Mar., 1887.


8 Superseding the series "Geology and Agriculture" work reported in Buls. 1-8 was done under the direction of the experiment station.

9 Bulletins 1-20, First Series, were issued as newspaper slips.

BULLETINS (SECOND SERIES). 16

2. The apple maggot (Trypetta pomonella Walsh); the potato rot (Phytophthora infestans De Bary (Peronospora infestans Mont.)). By F. L. Harvey. [1887?]
4. Testing cream and milk fat test and lactometer. By J. M. Bartlett. [1887?]
34. Box experiments with phosphates. By L. H. Merrill. Apr., 1897.
35. The current fly, Ephestia cautella L. By F. L. Harvey. May, 1897.
52. The spraying of plants. By W. M. Munson. May, 1899.
58. Finances, meteorology, and index. Dec., 1899.
69. Finances, meteorology, index. Dec., 1900.

16 The designation "Second series" was dropped after Bul. 25. Bulletins of this series, with the usual exception of those on inspection work, were reprinted in the annual reports of the station from 1893 to 1898, inclusive, and in the annual reports of the Maine Board of Agriculture (after 1901, Commissioner of Agriculture) from 1893 to 1906, inclusive.


78. Crop, meteorology, index. Dec., 1901.


111. Finances, meteorology, index. Dec., 1904.


113. Summarized experiments in practical horticulture; red clover from various sources. By W. M. Munson. Feb., 1905.


125. Finances, meteorology, index. Dec., 1905.


150. Finances, meteorology, index. Dec., 1907.


234. Abstracts of papers published by the station in 1915 but not included in the bulletins; finances; meteorology; index. Dec., 1914.


245. Abstracts of papers not included in bulletins; finances; meteorology; index. Dec., 1915.


251. Soluble poisons in the poisoned bait spray to control the adult of the apple maggot (Rhagoletis pomonella Walsh). By H. H. P. Severin. Apr., 1916.


257. Abstracts of papers not included in bulletins; finances; meteorology; index. Dec., 1916.


262. The composition of milk from cows, as determined from seven days record of Jersey cows. By Raymond Pearl and S. W. Patterson. July, 1917.


266. The chemical composition of green sprouted oats; fish wastes for feeding animals. By J. M. Bartlett. Nov., 1917.

267. The aphid of choke cherry and grain (Aphis pseudoavenae sp. n.). By Edith M. Patch. Nov., 1917.

268. Abstracts of papers not included in bulletin; finances; meteorology; index. Dec., 1917.


275. Abstracts of papers not included in bulletin; finances; meteorology; index. Dec., 1918.


279. The variation of Ayrshire cows in the quantity and fat content of their milk. By Raymond Pearl and J. R. Minor. Apr., 1919.


282. The pink and green aphid of the rose; food plant catalogue of the Aphididae of the world, VI. By Edith M. Patch. Dec., 1919.


284. Abstract of papers not included in bulletin; finances; meteorology; index. Dec., 1919.


295. Abstracts of papers not included in bulletin; finances; meteorology; index. Dec., 1920.
Agricultural bibliography of Maine... also an index to the volumes of Agriculture of Maine from 1830 to 1892. By B. W. McKeeen. 1888. (A separately paged report included in Ann. Rpt. of Me. Bd. Agr. 35, 1892.)

Note: The volumes indexed contain some accounts of early experimental work and, with a few exceptions, reports and bulletins of the agricultural experiment station up to and including 1892.


MARYLAND.

Maryland Agricultural Experiment Station, College Park.

BULLETINS.


7. Farm manures. By H. E. Alvord. Dec., 1889. Merely a statement that the material prepared for this bulletin was destroyed by fire.


31. The San José scale. By C. V. Riley. Apr., 1895.


55. The black peach aphis (Aphis prunivola Kalt.); cutworms in young tobacco; law providing for the suppression and control of insect pests and plant diseases in Maryland. By W. G. Johnson. May, 1898.
60. Insects and diseases of the sweet potato and how to control them. By C. O. Townsend. Mar., 1899.
83. The influence of the cause of pithiness in celery on the digestibility of this vegetable. By E. P. Sandsten and T. H. White. May, 1902.
84. Some feeding experiments with cows, and tables for the computation of rations for farm animals. By H. J. Patterson. June, 1902.
106. The influence of the size of the grain and the germ of corn upon the plant. By E. F. Walls. Sept., 1905.


141. The codling moth (Carpospes pomonella). By T. B. Symons and L. M. Pearis. Feb., 1910.


152. A study showing bacteria and animal organisms determined in the feces and intestinal mucus of healthy chickens. By G. E. Gage. May, 1911.


156. Some experiments with poultry: Increasing the egg production. By C. L. Opperman.—The time required for eggs to become fertile after a male has been added to the breeding pen. By R. H. Waite.—The persistence of fertility after the male has been removed from the breeding pen. By R. H. Waite. Sept., 1911.


165. How time is distributed through and lost from soils: Factors influencing the diffusion and depletion of lime in soils. By L. B. Broughton. May, 1912.


175. The peach-tick borers (Saminoides carlosa Say). By E. N. Cory. Apr., 1913.


183. The physical character of the curd of milk from different breeds; curd as an index of the food value of milk; studies of the proteid content of milk. By S. S. Buckley. June, 1914.
The Bulletin of the U. S. Department of Agriculture.


211. The control of house flies by the maggot trap. By E. N. Cory. Feb., 1918.


221. A comparison of several species of Lepidoptera infesting peach and apple in Maryland, with additional notes on the oriental peach moth. By Philip Garman. Oct., 1918.

222. Agricultural seed inspected in March and April, 1918. By C. P. Smith. Dec., 1918.


SPECIAL BULLETINS.


[D] Composition of commercial fertilizers sold in this State. Feb., 1891.


[G] Composition of commercial fertilizers sold in this State. Feb., 1892.


[I] Composition of commercial fertilizers sold in this State. Aug., 1892.


MASSACHUSETTS.

Massachusetts (State) Agricultural Experiment Station, Amherst, 1883-1895.

In 1883 the Massachusetts (State) Agricultural Experiment Station and the Hatch Experiment Station of the Massachusetts Agricultural College were consolidated under the name of the latter. In 1907 this name was changed to Massachusetts Agricultural Experiment Station.

BULLETINS.


9. Notes upon insects injurious to farm and garden crops. By S. T. Maynard.—Fodder and fodder analyses; fertilizer analyses. By C. A. Goessmann, June, 1884.


11. Notes on feeding experiments with corn ensilage, continued; fertilizer analyses; fodder and fodder analyses. By C. A. Goessmann, Sept., 1884.

12. Notes on feeding experiments with gluten meal as a constituent of the daily diet of milch cows; fodder and fodder analyses, By C. A. Goessmann, Oct., 1884.


15. Meteorological summary for two months ending Apr., 30.—Notes on feeding experiments with milch cows; analyses of fodder articles; fertilizer analyses. By C. A. Goessmann, Apr., 1885.

16. Meteorological summary for two months ending June 30.—Fodder analyses; analyses of garden crops; fodder analyses, By C. A. Goessmann, July, 1885.

17. Meteorological summary for month ending July 31.—Fodder analyses; analyses of fruits; analyses of weeds; fertilizer analyses. By C. A. Goessmann, Aug., 1885.

18. Meteorological summary for two months ending Sept. 30.—Notes on feeding experiments with pigs; fodder and fodder analyses. By C. A. Goessmann, Sept., 1885.


20. Meteorological summary for two months ending May 31.—Fodder and fodder analyses; fertilizers and fertilizer analyses; fertilizing constituents of feed. By C. A. Goessmann, May, 1886.


22. Meteorological summary for the four months ending Oct. 31.—Feeding experiment with milch cows; fodder and fodder analyses. By C. A. Goessmann, Oct., 1886.

23. Meteorological summary for the four months ending Feb. 29.—Trade values of fertilizing ingredients in raw materials and chemicals; fodder and fodder materials. By C. A. Goessmann. Mar., 1887.

24. Meteorological summary for the month ending Mar. 31.—Suggestions upon planting trees and small fruits. By S. T. Maynard.—[Fertilizer analyses]; fodder and fodder analyses. By C. A. Goessmann, Apr., 1887.


26. Meteorological summary for the month ending July 31.—Food and fodder analyses; fertilizer and fertilizer analyses. By C. A. Goessmann, Aug., 1887.


28. Meteorological summary for the five months ending Feb. 22.—Trade values of fertilizing ingredients in raw materials and chemicals; analyses of fertilizers; fodder analyses. By C. A. Goessmann, Mar., 1888.

29. Meteorological summary for three months ending May 31.—Fodder analyses. By C. A. Goessmann, June, 1888.


32. Meteorological summary for four months ending Jan. 31.—Record of twelve cows which served at the station for experiments to ascertain the cost of feed for the production of milk; analyses of fodder articles. By C. A. Goessmann, Feb., 1889.


34. Meteorological summary for the four months ending May 31.—Outlines of the work . . . during the present season: Department of vegetable physiology. By J. E. Humphrey.—Creamery records during the years 1887 and 1888; analyses of commercial fertilizers [etc.]. By C. A. Goessmann. June, 1889.


36. Meteorological summary for the four months ending Feb. 28.—Some suggestions regarding the question: Fodder and fodder analyses in an economical way for farm lands?—Analyses of fodder articles.—On commercial fertilizers. By C. A. Goessmann. Mar., 1890.

37. Meteorological summary for the four months ending June 30.—Feeding experiments with lambs; fodder analyses. By C. A. Goessmann, June, 1890.


41. Meteorological summary for two months ending Aug. 31.—Analyses of commercial fertilizers; feeding experiments with milch cows, Nov., 1890 to May, 1891. By C. A. Goessmann. Sept., 1891.

42. Feeding experiments with milch cows, Nov., 1891 to Mar., 1892; analyses of fodder articles. By C. A. Goessmann. June, 1892.

43. Meteorological summary for seven months ending July 31.—Winter feeding experiments with lambs, Nov., 1891 to May, 1892: analyses of commercial fertilizers. By C. A. Goessmann. Aug., 1892.

44. Meteorological summary for August and September.—Feeding experiments with steers. By C. A. Goessmann. Oct., 1892.


46. Never published. This number has been given to the following publications: Analyses of commercial fertilizers, by C. A. Goessmann, Nov., 1892 and Circular on commercial fertilizers, by C. A. Goessmann. Mar., 1893.


50. Meteorological summary for August and September, 1892-93.—Analyses of commercial fertilizers collected during 1893; analyses of commercial fertilizers and manural substances sent on for examination; trade values of fertilizing ingredients. By C. A. Goessmann. Oct., 1893.


52. Meteorological summary for five months ending May 31, 1894.—Analyses of commercial fertilizers collected during 1894; analyses of commercial fertilizers and manural substances sent on for examination; trade values of commercial fertilizers. By C. A. Goessmann. June, 1894.

53. Meteorological summary for first two months of 1894.—Analyses of commercial fertilizers and manural substances sent on for examination; trade values of fertilizing ingredients. By C. A. Goessmann. June, 1894.


55. Meteorological summary for August and September, 1894.—Analyses of commercial fertilizers collected during 1894; analyses of commercial fertilizers and manural substances sent on for examination; trade values of fertilizing ingredients. By C. A. Goessmann. Oct., 1894.

56. Meteorological summary for October, 1894.—Analyses of commercial fertilizers collected during 1894; analyses of fodder articles; trade values of fertilizing ingredients. By C. A. Goessmann. Nov., 1894.

57. Meteorological record for January—February, 1895.—Analyses of human food articles (oats); analyses of fodder articles; analyses of manural substances; trade values. By C. A. Goessmann. Mar., 1895.

INDEXES.

Index number of reports of Massachusetts State Agricultural Experiment Station, Vols. 1-12, 1883-1894, By C. A. Goessmann. 1895.

Hatch Experiment Station of the Massachusetts Agricultural College, Amherst, 1885-1906. Massachusetts Agricultural Experiment Station, Amherst.

BULLETINS.


4. Experiments in heating greenhouses, steam heat versus hot water; greenhouse walls; glazing experiment; greenhouse pests and plant diseases; testing new varieties [of fruits and vegetables]. By S. T. Maynard. Apr., 1889.


8. Experiments in greenhouse heating, steam versus hot water; some observations on peach yellows. By S. T. Maynard.—How far may a cow be tuberculous before her milk becomes dangerous as an article of food? By H. C. Ernst. Apr., 1890.


10. On special fertilizers for greenhouse crops; [injury to peaches from cold and from plum curculio]; report on small fruits. By S. T. Maynard. Oct., 1890.


16. A brief summary of results in electrophotography gathered from various sources; also some experiments made at the station with lettuce grown under the influence of dynamical electricity. By C. D. Warner. Jan., 1892.
17. *Experiments with fungicides and insecticides; testing new varieties of grapes and peaches; protection of peach buds; amount of copper on sprayed fruit; the Siberian crab as a stock; girdling grape vines; keeping qualities of grapes; report of spraying apparatus; outline of work for 1892.* By S. T. Maynard. [Jan., 1893.] Apr., 1892.

18. Fertilizers for potatoes, oats, and corn; the use of muriate of potash with manures for corn: "special corn" fertilizers versus fertilizer richer in potash; comparison of corn and millet as grain crops; proximate composition of potatoes as affected by fertilizers; reports on miscellaneous crops: Oats, hemp, flax, English wheats, Japanese millets and beans. By W. P. Brooks [and others]. Apr., 1892.


38. General discussion on commercial fertilizers; analyses of fertilizer materials sent on for examination; observations regarding the composition of Paris green; observations concerning the action of muriate of potash on the lime constituents of the soil. By C. A. Goessmann. Mar., 1896.


42. Analyses of manural substances sent on for examination; analyses of licensed fertilizers collected by the agent of the station during 1896; new laws for the regulation of the trade in commercial fertilizers in Massachusetts. By C. A. Goessmann. 1896.


44. Variety tests of fruits; tests of vegetable seeds; [spraying for the destruction of insects and fungous growths.] By S. T. Maynard, J. H. Putnam and S. W. Fletcher. Mar., 1897.

45. General discussion on manural fertilizers; analyses of fertilizing materials sent on for examination; new fertilizer law. By C. A. Goessmann. Mar., 1897.


47. On field experiments with tobacco in Massachusetts, 1895-1896. By C. A. Goessmann. Apr., 1897.


49. Analyses of manural substances sent on for examination; analyses of licensed fertilizers collected by the agent of the station during 1897. By C. A. Goessmann. Nov., 1897.


51. Analyses of manural substances sent on for examination; analyses of licensed fertilizers collected by the agent of the station during 1897. By C. A. Goessmann. Feb., 1898.


53. Concentrated feed stuffs. By J. B. Lindsey [and others]. Apr., 1898.


56. Concentrated feed stuffs. By J. B. Lindsey [and others]. Nov., 1898.

57. Analyses of manural substances sent on for examination; analyses of licensed fertilizers collected by the agent of the station during 1898. By C. A. Goessmann. Nov., 1898.


60. Insecticides, fungicides, spraying calendar. By S. T. Maynard. Apr., 1899.


64. Concentrated feed stuffs. By J. B. Lindsey [and others]. Feb., 1900.

65. Analyses of manural substances sent on for examination; analyses of licensed fertilizers collected by the agent of the station during 1899; instructions regarding the sampling of materials; discussion of trade values; Instructions to manufacturers of commercial fertilizers. By C. A. Goessmann. Mar., 1900.


68. Analyses of manural substances sent on for examination; analyses of licensed fertilizers collected by the agent of the station during 1899. By C. A. Goessmann. July, 1900.


70. Analyses of manural substances sent on for examination; analyses of licensed fertilizers collected by the agent of the station during 1900. By C. A. Goessmann. Nov., 1900.


73. Orchard experiments; fertilizers for fruits; thinning fruits; spraying fruits. By S. T. Maynard and T. V. Brooks. Mar., 1901.

74. Analyses of manurial substances sent on for examination; analyses of Paris green and other insecticides; instructions regarding the sampling of materials; discussion of trade values of fertilizing ingredients; laws for the regulation of the trade in commercial fertilizers; instructions to manufacturers of insecticides. By C. A. Goessmann. Apr., 1904.

75. Analyses of manurial substances sent on for examination; analyses of licensed fertilizers collected by the agent of the station during 1901. By C. A. Goessmann. July, 1901.


77. Analyses of manurial substances sent on for examination; analyses of licensed fertilizers collected by the agent of the station during 1901. By C. A. Goessmann. Nov., 1901.


81. Analyses of manurial substances sent on for examination; analyses of Paris green; instructions to manufacturers of commercial fertilizers; analyses of licensed fertilizers collected by the agent of the station during 1901; instructions regarding the sampling of materials. By C. A. Goessmann.—Contribution on the treatment of barnyard manure with absorbents. By H. D. Haskins.—Discussion of trade values of fertilizing ingredients. By C. A. Goessmann. Mar., 1902.


86. Orchard treatment for the San José scale; one year’s experiments in Massachusetts. By H. T. Fernald. Feb., 1903.


89. Analyses of manurial substances sent on for examination; discussion of trade values of fertilizing ingredients for 1903; discussion on the ash analyses of plants; instructions regarding sampling. By C. A. Goessmann. May, 1904.

90. Analyses of manurial substances sent on for examination; analyses of licensed fertilizers collected by the agent of the station during 1903. By C. A. Goessmann. July, 1903.


100. Analyses of manurial substances forwarded for examination; analyses of licensed fertilizers collected in the general markets; market values of fertilizing ingredients. By C. A. Goessmann. July, 1904.


103. Analyses of manurial substances forwarded for examination; instructions regarding the sampling of materials; instructions to manufacturers of commercial fertilizers; discussion of trade values of fertilizing ingredients for 1905. By C. A. Goessmann. Mar., 1905.


109. Analyses of manurial substances forwarded for examination; analyses of Paris green and other insecticides; instructions regarding the sampling of materials; instructions to manufacturers of commercial fertilizers; discussion of trade values of fertilizing ingredients for 1906. By C. A. Goessmann. Mar., 1906.


114. The oriental moth (Cnidosca m f l a v e n s e m s Walk.), a recent importation. By H. T. Fernald. Jan.., 1907.


120. Inspection of commercial feed stuffs. By P. H. Smith [and others]. Feb., 1908.


167. The relation of hydrogen ion concentration of media to the proteolytic activity of Bacillus subtilis; protelysis of Strept. crysipelatis and Strept. lacticus compared under different hydrogen ion concentration. By Aaro Itano. Jan., 1916.
184. Late dormant versus delayed dormant or green tip treatment for the control of apple aphids. By W. S. Regan. July, 1918.
188. The nutrition of the horse. By J. B. Lindsey. Dec., 1891.

SPECIAL BULLETINS.


TECHNICAL BULLETINS.


INDEXES.

Index to all bulletins and annual reports published to date, June, 1895. 1895.
Index [to] Bulletins [1-114] and Reports [1-19], 1888-[Jan.], 1897. 1907.

MICHIGAN.

Experiment Station of Michigan State Agricultural College, East Lansing.

BULLETINS.

Bulletins 1-33, 1855-1888, were issued by the Michigan Agricultural College prior to the organization of the agricultural experiment station under the Hatch Act. Publications of the station with the exception of quarterly bulletins have been reprinted in the annual reports of the Michigan State Board of Agriculture.

10. A disease among horses the result of injudicious feeding. By E. A. Gange. Feb., 1886.
13. Potato culture. Varieties; experiments with different amounts of seed. By Samuel Johnson. [Apr., 1886.]
18. Wheat: Notes on different varieties; experiments with different amounts of seed. By Samuel Johnson. Sept., 1886.
Michigan Agricultural Experiment Station.

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40. Quantities of seed required for given lengths of drill; experiments in hybridizing; notes on radishes; notes on germination; effects of latitude on season of flowering and fruiting. By L. H. Bailey. Oct., 1888.
47. Spruce不佳。By A. J. Cook. Apr., 1889.
48. Horticultural department: Potatoes; kale; experiments with squashes; tomatoes. By L. R. Taft. Apr., 1890.
56. Rib grass or narrow-leaved plantain in fields of clover. By W. J. Beal. Feb., 1890.
60. Figs—seed tests; potatoes—variety tests. By Eugene Davenport. Apr., 1890.
74. Foot rot in sheep. By E. A. A. Grange. May, 1891.


181. Soil tests on upland and muck; clover and sand lucerne notes; wheat experiments. By J. D. Tobar. Apr., 1900.


Alfalfa Feeding Preliminary

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BULLETIN 1199, U. S. DEPARTMENT OF AGRICULTURE.


QUARTERLY BULLETINS.


SPECIAL BULLETINS.

17. An investigation of soil temperature and some of the most important factors influencing it. By G. J. Bouyoucos. Feb., 1918.
21. How contact insecticides kill: III. Relating evidence, further, of certain properties of carbon disulphide, gasoline, and a few other fluids, as well as temperature and some powdered contact insecticides, by means of which the insecticidal action of these agents is accomplished after their absorption into the insect tissues, or after more application; including also brief suggestions for possible practice. By G. D. Shafer. July, 1915.
44. Rate and extent of solubility of soils under different treatments and conditions. By G. J. Bouyoucos. June, 1919.
49. Studies on host specificity of various root-knot nematodes. I. On the presence of nematodes and deeper layers of the mucous membrane of the nongravid uterus: 1, a few notes on the isolation and cultivation of *Bacterium abortus* with special reference to liver and spleen media; 3, on the possibility of differentiating between infected and immune animals in infections abortion. By H. J. Stasfeld.—4. The isolation of *Bacterium abortus* from milk. By I. F. Huddelson. Nov., 1920.

MINNESOTA.

Agricultural Experiment Station of the University of Minnesota, University Farm, St. Paul.

BULLETINS.


76 BULLETIN 1199. U. S. DEPARTMENT OF AGRICULTURE.


10. Onions on land plowed and unplowed; trial of cabbage; syringing with London purple to kill the curculio on our native plums; bagging grapes; rolling-stone plums; potatoes at different depths. By D. N. Harper. — Oak eaters. By Otto Lugger. Mar., 1890.


14. Swine feeding for profit; swine breeding. By W. N. McLain. — Sugar beets; Their cultivation, the process of manufacture, etc. By D. N. Harper and W. M. Hays. Jan., 1891.

15. Wheat: A comparison of foreign and native varieties, the selection and changing of seed, etc. By D. N. Harper. Feb., 1891.


25. Report on small fruit; notes on trial stations; notes on renewing old strawberry beds; shading strawberry beds; seedling fruits; analyses of grapes; spraying grapevines. [By S. B. Green and others.] Dec., 1892.


27. The composition of fodder, wheat, and milled products; the composition of dairy products; sugar beets. By Harry Snyder. Feb., 1893.


29. Wheat: Heavy and light weight seed wheat; the vigor of growth of the wheat plant; the draft of the wheat plant upon the soil in different stages of its growth. By Harry Snyder. Dec., 1893.


32. Late blight and rot of the potato; potato scab; cross fertilization of grapes; conservation of moisture in fruits, nuts, and varieties. By S. B. Green. Dec., 1893.


34. The chemical development and value of red clover; the Russian thistle, its food value and draft upon the soil. By Harry Snyder. Sept., 1894.

35. Dairy herd record for 1893; cost of butter production in winter; comparing prairie hay with timothy; rearing dairy calves; cooperative creameries; experiments in sweet-curd cheese. By T. L. Haecker. Oct., 1894.


39. Potatoes (the potato; potatoes, potatoes; and internal brown rot); tomatoes (variety tests, training; strawberries (variety tests); apple-tree sun seal; raspberries (variety tests, cane rust). By S. B. Green. Dec., 1894.


41. Soils: The essential elements of soil fertility; humus as a factor of soil fertility; the chemical and mechanical analyses of soils; the action of organic and mineral acids upon soils; comparison of different methods of farming upon the conservation of soil fertility. By Harry Snyder. Aug., 1895.

42. The composition, digestibility, and food value of potatoes. By Harry Snyder. Dec., 1895.


44. Fattening steers in winter; fattening lambs in winter. By Thomas Shaw. Dec., 1895.

45. Potatoes (variety tests, treatment for potato scab and blight, internal brown rot); tomatoes (variety tests, internal brown rot); sweet corn for rot; small fruits (variety tests); spray pumps (new form of and strainer for). By S. B. Green. Dec., 1895.

46. Fungus and grain crops; cross rotation experiments; smut in wheat; three annual weeds; tillage experiments. — Miscellaneous results. By E. A. Beals. Dec., 1895.


Progress at the several experiment farms in 1899: beans—barley—corn—oats—wheat—variety tests; wheats selected versus largest average hard red korns for feed; rotation of crops; cross rotation experiments; root crops (variety tests). By W. M. Hays [and others]. Dec., 1899.


34. Human food investigations: the gluten of wheat; the digestibility and composition of bread; the loss of food value by prolonged fermentation in bread making; the digestibility of potatoes, and the loss of food value when potatoes, carrots, and cabbages are boiled in different ways; the rational feeding of men. By Harry Snyder. Sept., 1897.


36. Sugar beets: Summary of investigations from 1888 to 1898; report for 1897; proposed experiments for 1899. By Harry Snyder, Andrew Boss, and W. M. Liggett. Apr., 1898.


43. The black rust or summer rust, the Hessian fly, migratory locusts, or grasshoppers. By Otto Lugger. Oct., 1899.

44. Soil investigations: The chemical composition of soils; the mechanical composition of soils; the average chemical composition of soils; characteristic features of Minnesota soils and the conservation of the fertility of the soil. By Harry Snyder. Nov., 1899.


53. Human food investigations: The digestibility and food value of beans, cheese, butter, oatmeal, graham, entire wheat, and patent grade flours and bread and toast; influence of the enzymes or chemical fermentations of milk upon the digestibility of foods. By Harry Snyder. Apr., 1902.


66. Potatoes at University Farm. [By S. B. Green and Harold Cushman.] Nov., 1904.


71. The digestibility and nutritive value of cottage cheese, rice, peas, and bacon. By Harry Snyder. May, 1905.


73. Soil investigations: Fertilizer tests with wheat and corn; the loss of nitrogen from soils. By Harry Snyder. Feb., 1906.


77. Stable ventilation: Purpose, scope and need for such work. By M. H. Reynolds and C. C. Lipp. Nov., 1906.


81. Soil investigations: Fertilizer tests with wheat and corn; influence of fertilizers upon the composition and quality of wheat; a comparison of chemical methods and field tests for determining the fertility of soils. By Harry Snyder. Sept., 1907.


193. Investigations in beef production: The composition of steers at the various stages of growth and fattening; the relation of feed nutrients consumed to substance stored in the body during various stages of growth and fattening; nutrient requirements for beef production based upon digestible nutrients. By T. L. Haeger. Sept., 1920.


MISSISSIPPI

MISSISSIPPI

Mississippi Agricultural Experiment Station, Agricultural College.

BULLETINS.


19. The southern tomato blight. By D. D. Haisted. Jan., 1892. Includes an article on bacterial melon blight which was also published in Bot. Gaz., 16 (1891), No. 11, p. 363-365.


21. Insects injurious to the cabbage. By H. E. Weed.—A new method for testing milk. By L. G. Pat-

terson.—Feeding for milk and butter. By E. R. Lloyd. June, 1892.


MISSISSIPPI—MISSOURI.


TECHNICAL BULLETINS.

Missouri Agricultural Experiment Station, Columbia.

BULLETINS.

The first 35 bulletins of this list, 1883-1888, were issued as publications of the College of Agriculture of the University of Missouri. Bulletin 35 of the series is the same as Experiment Station Bulletin 2.

1. (Experiment with pigs.) By J. W. Sanborn. Jan., 1883.
11. [Value of corn fodder as stock food.] By J. W. Sanborn. 1884.
12. [Seed potatoes.] By J. W. Sanborn. 1884.
17. General observations [on forage crops]. By J. W. Sanborn. 1885.
33. Glanders, mad itch of cattle, etc. By Paul Paquin. 1888.
35. Same as 2 of the next series.

1. Announcement to farmers; the so-called "Hatch bill;" assent of governor; plans of organization; writer and experiments proposed this season; personnel of station. By Paul Schweitzer. 1888.
3. Generalities and experiments in spaying cattle (to be continued); appendix on glanders. By Paul Paquin. [1888?]
6. Experiments on seed germination, pea weevil, and apples. By J. W. Clark. [1889?]
7. Germination and dry storage of fodder. By J. W. Sanborn. [1889?]
8. Experiments on feeding ensilage against dry fodder. By J. W. Sanborn. [1889?]
10. Analyses of apples at various stages of growth: Bordeaux mixture for grape rot; comparative tests on mulberries and peaches. By J. W. Clark. Apr., 1890.
11. Texas fever, investigations between September, 1888, and March, 1889 [i. e., 1890]. By Paul Paquin. May, 1890.
13. Reports on spraying for the codling moth, apple scab, and black rot of the grape; reports on strawberries, raspberries, blackberries, tomatoes, peas, and potatoes; list of new fruit received for testing. By J. W. Clark. Jan., 1891.


16. Covering peach trees to protect the fruit buds; spread of pear blight; temperature and rain tables; strawberry tests; potato triats; seedling fruits. By J. W. Clark. Nov., 1891.


21. Field experiments with wheat. By C. M. Conner. Apr., 1892 [i.e., Jan., 1890].


38. The benjamin of the old growth in Missouri. By J. C. Whitten. Apr., 1897.


43. Winter forcing of asparagus in the open field; asparagus culture for Missouri. By J. C. Whitten. May, 1898.

44. The fruit-tree bark-beetle; the common apple-tree and peach-tree borers. By J. M. Stedman. Oct., 1898.


64. The ‘sting’ in the apple, the work of the plum curculio [Cenotracchellus nemudad, Hb.] in the apple. By J. M. Stedman. July, 1904.


75. Wintering yearling cattle. By H. J. Waters. Apr., 1907.


77. Inspection of commercial fertilizers [in 1906]. By H. J. Waters. [1907]


82. Inspection of commercial fertilizers [in 1908]. By P. F. Trowbridge. [p. 41.]


Inspection of commercial fertilizers. By F. B. Mumford and others. Feb., 1911.

The influences of chemical composition upon fruit growers. By R. C. Douglass and others. Feb., 1911.


Ration report of the year for the ending June 30, 1910. By F. B. Mumford. Feb., 1911.


The San Jose scale in Missouri. By Leonard Haseman. Jan., 1912.


The control of the San Jose scale in Missouri. By Leonard Haseman. Apr., 1915.


RESEARCH BULLETINS.


12. Carotin, the principal natural yellow pigment of milk fat: IV, (A), The yellow pigment of blood serum; (B) carotin and xanthophylls during digestion; (C) the pigments of human milk fat. By L. S. Palmer and C. H. Eckles. Apr., 1914.


MONTANA.

Montana Agricultural Experiment Station, Bozeman.

BULLETINS.

2. Smuts of wheat, oats, and barley. By Luther Foster. May, 1894.
17. The grain aphis; an army cutworm. By E. V. Wilcox. Apr., 1898.
22. The feeding of strawberries to frost; potato scab; treatment of seed oats for smut; losses caused by the grain aphis; roup of chickens; the internal chicken mite; lupines as plants poisonous to stock; cattle poisoning by the tall larkspur; poisoning of stock by the water hemlock; ergotism in horses; the poisoning of cattle by smutty oat hay; list of plants of known or suspected poisonous properties which occur within the State; some native forage plants of the State. By E. V. Wilcox. June, 1899.
52. Sugar beets, the crop of 1903. By F. W. Traphagen. Apr., 1904.
58. Fattening cattle for the years 1904 and 1905. By F. B. Linfield, Nov., 1905.


73. Pig feeding experiments. F. B. Linfield. Sept., 1908.


75. Sixth annual report of the State entomologist of Montana. [Dec., 1909].


120. Date and rate-seeding tests with spring grains under irrigation. By Alfred Atkinson. Oct., 1917.


NEBRASKA.

Agricultural Experiment Station of Nebraska, Lincoln.

BULLETINS.


7-10. Original investigations of cattle diseases in Nebraska, 1880-1888: Southern cattle plague (Texas fever) and yellow fever; the cornstalk disease in cattle; the so-called phlobaphia in cattle; contagious inflammation of the cornea in cattle; a singular disease of the sexual organs in cows. By J. S. Billings. June, 1888. See 22-23 and 29.


37. Monthly weather review of the Nebraska weather service, 1894. By G. D. Sweezy and G. A. Loveland. [In seven parts.] Jan.-Dec., 1894. Name of station and bulletin numbers are printed inconspicuously at foot of title pages of the various parts, part 1 for Jan.—May; parts 2-7, monthly.


42. Nebraska weather review for 1895. By G. D. Sweezy and G. A. Loveland. [In thirteen parts.] Jan.—Dec., 1895.


59. The homemade windmills of Nebraska. By E. H. Barbour. 1899.
64. Proceedings of agricultural students' association, 1899-1900. May, 1900.
70. Locusts or grasshoppers. By Lawrence Bruner. Mar., 1901.
71. Sheep feeding experiments in Nebraska. (Second experiment.) By E. A. Burnett. Sept., 1901.
120. Alfalfa management. By C. W. Pugsley. (Extension Bul. 1) May 12, 1911.
121. Growing hogs in Nebraska: The cost of a 50-pound pig, and the cost of keeping brood sows; the cost of growing pigs on alfalfa pasture and grain. By W. P. Snyder. (North Platte Substation Bul. 8.) June 30, 1911.


130. Forage rations for growing horses. By W. P. Snyder. (North Platte Substation Bul. 11.) June 1, 1912.


133. Care of milk and cream on the farm. By J. H. Frandsen. (Extension Bul. 8.) Oct. 21, 1912.


141. Irrigated field crops in western Nebraska. By Fritz Knorr. (Scottsbluff Substation Bul. 1.) May 1, 1914.

142. Vegetable gardens on irrigated farms in western Nebraska. By Fritz Knorr. (Scottsbluff Substation Bul. 2.) Apr. 27, 1914.


156. Fucating pasture in the sand hills section of Nebraska. By James Cowan. (Valentine Substation Bul. 1.) May 25, 1916.


165. Growing pigs in summer. By W. P. Snyder. (North Platte Substation Bul. 20.) June 15, 1918.


171. Crop production in the northern sand hills. (Valentine Substation Bul. 2.) By James Cowan. May, 1919.


RESEARCH BULLETINS.


NEVADA.

Nevada Agricultural Experiment Station, Reno.

BULLETINS.

17. The woolly aphids of the apple (Schizoneura lanigera Haus.). By F. H. Hillman. July, 1892.
NEVADA—NEW HAMPSHIRE.

63. Annual report of the board of control, the director [J. E. Stubbs] and members of the station staff for the fiscal year ending June 30th, 1907. Dec., 1907.
66. Annual report of the board of control, the director [J. E. Stubbs], and the members of the station staff for the fiscal year ending June 30th, 1908. Dec., 1908.
70. Food and drug inspection. May, 1909.
72. Annual report of the board of control, the director [J. E. Stubbs], and the members of the station staff for the fiscal year ending June 30, 1909. Dec., 1909.
74. Annual report of the board of control, the director [J. E. Stubbs], and the members of the station staff for the fiscal year ending June 30, 1910. Dec., 1910.
77. The potato eelworm. By S. B. Doten and Peter Frandsen. Mar., 1911, also Italian translation.
78. Fixing standard weights and measures. May, 1911.
81. Food and drug and weight and measures laws of the State of Nevada, with the rules and regulations adopted for the enforcement of the same. Nov., 1913.
93. Irrigation in Nevada. By C. S. Knight. [Feb., 1918.]
100. The narrow-leaved milkweed (Asclepias maritima) and the broad-leaved or showy milkweed (Asclepias speciosa), plants poisonous to live stock in Nevada. By C. E. Fleming [and others]. Dec., 1920.

NEW HAMPSHIRE.

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2. Feeding experiments. [By G. H. Whitener.] June, 1888.


34. Surface and sub-irrigation out of doors. By F. W. Rane. Apr., 1896.


43. Some interior wood ashes. By F. W. Morse. Feb., 1897.

44. The walnut worm. By C. M. Weed. Apr., 1897.


53. The farm water supply. By F. W. Morse. May, 1898.


64. The forest tent caterpillar. By C. M. Weed. Apr., 1899.


76. Utilizing the greenhouse in summer. By F. W. Rane. June, 1900.


95. How to grow a forest from seed. By F. W. Rane. Nov., 1902.


104. Fifteenth annual report [1903]. By F. W. Morse [and others]. Nov., 1903.


126. The care of composite milk samples. By I. C. Weld. Apr., 1906 [i. e. 1905].


131. Spraying the apple orchard. By E. D. Sanderson, T. J. Headlee, and Charles Brooks. Apr., 1907. See also 143.


135. The respiration of apples and its relation to their keeping. By F. W. Morse. Feb., 1908.


143. The codling moth and how to control it by spraying. By E. D. Sanderson. Dec., 1909. Gives practical results of experiments reported in 131.


156. Results of seed tests for 1911 made for the State board of agriculture. By F. W. Taylor. Feb., 1912.


163. Twenty-third and twenty-fourth reports [1911-12]. By [J. C. Kendall and others.] Nov. 1, 1912.

164. Results of seed tests for 1912 made for the State board of agriculture. By F. W. Taylor. Feb., 1913.

166. Results of seed tests for 1913 made for the State board of agriculture. By F. W. Taylor and Frank App. Sept., 1914.


188. Results of seed tests for 1918 made for the State department of agriculture. By F. W. Taylor. Aug., 1918.


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Results of field and laboratory experiments with sorghum for the season of 1883. By G. H. Cook. Nov. 16, 1883.


[Meaning of station's valuations; schedule of trade values for 1885, and chemical composition, retail price, and commercial valuations of fertilizer supplies.] By G. H. Cook. July 1, 1885.


[Meaning of station's valuations; schedule of trade values for 1885, and chemical composition, retail price, and commercial valuations of fertilizer supplies.] By G. H. Cook. Mar. 19, 1886.


The extraction of sugar from sorghum at Rio Grande, Cape May County, New Jersey. Jan. 22, 1887.


Analyses and valuations of complete fertilizers, ground bone, and miscellaneous samples of other fertilizing materials. By G. H. Cook. Nov. 10, 1888.


What are the worst weeds of New Jersey? By B. D. Halsted. Mar. 20, 1889.


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76. Studies of the diseases of the sweet potato. By B. D. Halsted. Nov. 29, 1890.
82. The rose chafer or "rosebug" (Macrodactyla subspinosa). By J. B. Smith. July 3, 1891.
86. Spraying for insect and fungous pests of the orchard and vineyard. By J. B. Smith and B. D. Halsted. Apr. 4, 1892.
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94. Insects injurious to cucurbits (melons, squashes, pumpkins, cucumbers, etc.). By J. B. Smith. July 2, 1895.
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Field experiments with nitrate of soda on forage crops and on market garden crops. By E. B. Voorhees. June 1, 1903.


Analyses of fertilizer supplies and home mixtures; analyses and valuations of commercial fertilizers and ground bone. By J. P. Street, W. P. Allen, and V. J. Carberry. Sept. 10, 1903.

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Alfalfa hay, cowpea hay, and soy bean silage as substitutes for purchased feeds; cottonseed meal versus wheat bran and dried brewers’ grains. By C. B. Lane. Feb. 20, 1904.


Analyses of fertilizer supplies, home mixtures, and special compounds: analyses and valuations of commercial fertilizers and ground bone. By J. P. Street, W. P. Allen, and V. J. Carberry. Nov. 29, 1903.

Dried beet pulp as a substitute for corn silage; dried beet pulp versus dried molasses beet pulp; dried beet pulp as a component of hay. By G. A. Billings. June 6, 1905.


Analyses and valuations of commercial fertilizers; analyses of fertilizer supplies, home mixtures, and special compounds. By J. P. Street, W. P. Allen, and V. J. Carberry. Sept. 12, 1906.


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215. Analyses and valuations of commercial fertilizers; analyses of fertilizer supplies, home mixtures and compounds. By C. S. Cathcart and [others]. Sept. 24, 1908.


224. Analyses and valuations of commercial fertilizers and ground bone. By C. S. Cathcart and [others].—


236. Insects injurious to the peach trees in New Jersey. By J. B. Smith. Feb. 28, 1911.


241. Analyses and valuations of commercial fertilizers; analyses of fertilizer supplies, home mixtures, and special compounds. By G. S. Cathcart and [others]. Sept. 26, 1911.


244. Insects injurious to sweet potatoes in New Jersey. By J. B. Smith. June 1, 1912.


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254. Analyses and valuations of commercial fertilizers and ground bone. By C. S. Cathcart and [others]. Nov. 30, 1912.


299. The influence of salinity on the development of certain species of mosquito larvae and its bearing on the problem of the distribution of species. By F. E. Childer. [1917?]

300. A biological study of the more important of the fish enemies of the salt marsh mosquitoes. By F. E. Childer. June 1, 1916.


320. Farm profits and factors influencing farm profits on 460 dairy farms in Sussex County, N. J. By Frank App. July 1, 1917.


332. Some studies on the eggs of important apple plant lice. By Alvah Peterson. [1917?]


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B. Alfalfa or lucerne (Medicago sativa). By G. H. Cook. Apr. 15, 1887.

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M. Field experiments with soil and black root of sweet potatoes. By B. D. Halsted. Nov. 23, 1891.

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O. Experiments with nitrate of soda upon tomatoes. By E. B. Voorhees. Apr. 6, 1892.

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Q. Some fungous diseases of the celery. By B. D. Halsted. Apr. 21, 1892.

R. Catalogue of reports and bulletins: Index of reports, 1850-1897, Dec. 31, 1897.


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Report of the New Jersey State Agricultural Experiment Station upon the mosquitoes occurring within the State, their habits, life history, &c. By J. B. Smith. 1904.

NEW MEXICO.

Agricultural Experiment Station of New Mexico, State College.

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94. The grape leafhopper. By D. E. Merrill, Apr., 1915.


98. Economic feeding for milk production in New Mexico. By Luther Foster and R. W. Latta, June, 1915.


105. New Mexico beans. By Fabian Garcia [and others], Mar., 1917.

106. The bean beetle (Epidotum corrupta Muls.). By D. E. Merrill, Apr., 1917.


111. Sudan grass. By R. L. Stewart and Luther Foster, Apr., 1918.

112. Habits of feeding on alfalfa by R. J. Maynard, May, 1918.

113. Climate in relation to crop adaptation in New Mexico. By C. E. Limney and Fabian Garcia, June, 1918.

114. Range cow maintenance on yucca and sotol. By Luther Foster and C. W. Humble—Collection, preparation, and feeding of seaweed under practical range conditions on the Jornada range reserve. By C. L. Forsling, July, 1918.


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2. [Feeding lambs for fat and lean.] By I. P. Roberts [and A. de Barros], Aug., 1888.


5. On the production of lean meat in mature animals; does heating milk affect the quality or quantity of butter? By I. P. Roberts, Apr., 1889.

6. On the determination of hydroscopic water in air-dried fodders; the determination of nitrogen by the ammonia method of treatment of the solution resulting from the Ljoldahl digestion; fodders and feeding stuffs. By W. P. Cutter, June, 1889.


15. Sundry investigations made during the year. By W. P. Cutter [and others], Dec., 1890.


20. Creation raising by dilution; variations in fat of milk served to customers in dipping from cans. By H. H. Wing and C. D. Smith, Sept., 1890.


25. Sundry investigations made during the year. By Harry Snyder [and others], Dec., 1890.

12 The Agricultural Experiment Station at Cornell University was established in 1879. Prior to its reorganization in 1888, three reports giving results of the work were issued.
27. The production and care of farm manures. By I. P. Roberts. May, 1891.
37. Sundry investigations made during the year. By Harry Snyder [and others]. Dec., 1891.
52. Cost of milk production; variation in individual cows. By H. H. Wing.—Fertilizers. By G. C. Wat-
68. The cultivated poplars, with remarks upon the planting of grounds. By L. H. Bailey. Aug., 1894.
78. The cabbage root maggot, with notes on the onion maggot and allied insects. By M. V. Slinger-
90. The China asters, with remarks upon flower beds. By L. H. Bailey. Apr., 1895.
91. Recent chrysanthemums. By Michael Barker. Apr., 1895.
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170. The grape rootworm or grape-vine Fidia: Further experiments and cultural suggestions (Fidea viticola Walsh). By M. V. Slingerland.—The vineyard. By John Craig. Dec., 1902.


175. The ribbed cocoon-maker of the apple (Bucculatrix pomiOliella Clemens). By M. V. Slingerland and Philip L. Fletcher. Dec., 1903.


178. Spray calendar. Mar., 1904. Supersedes 188; see also 245.


185. Two grape pests: Effective spraying for the grape-root worm; a new grape enemy, the grape blossom-bud gnat. By M. V. Slingerland and Fred Johnson. Nov., 1904.


193. Experiments on the influence of fertilizers upon the yield of timothy hay when grown on Dunckirk clay loam in Tompkins County, N. Y. By J. W. Gilmore and Samuel Fraser. Aug., 1905.


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331. The asparagus miner (Aromia simplex Loew) and the twelve-spotted asparagus beetle (Crioceris aconitifolii L.). By D. E. Findley. Apr., 1913.


333. Control of two elm-tree pests: The elm leaf-beetle (Galerucella lativoltella); the elm leaf-miner (Kallophorus simpsoni Bluck). By W. W. Herrick. May, 1913.


355. Two factors causing variation in the weight of print butter. By H. M. Pickerill and E. S. Guthrie. Feb., 1915.


391. A revision of the genus Lygus as it occurs in America north of Mexico, with biological data on the species from New York. By H. H. Knight. May, 1917.


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2. The action of certain nutrient and nonnutrient bases on plant growth; the antitoxic action of certain nutrient and nonnutrient bases with respect to plants; the toxicity of manganese and the antitoxic action of iron with respect to plants; toxicity of various cations with respect to green plants; toxicity of various cations. By M. M. McCool. Aug., 1913.


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13 Bulletins 1-115 of this series were printed as newspaper slips.
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7. Yield of potatoes from seed cut in different ways; Facy's ray grass; Soja hopenp. or Japanese bean; planting soja bean; filling the silo with corn; effect of tillage on evaporation; cucumbers. By E. L. Sturtevant. Sept. 9, 1882.

8. Soja bean; pasture grasses; improvement of seed wheat; analysis of the tomato; sugar in the stalk of field corn. By E. L. Sturtevant. Sept. 23, 1882.


35. [Effect of using seed from different parts of the plant.] By E. L. Sturtevant. Apr. 7, 1883.


38. [The cutting of seed potatoes.] By E. L. Sturtevant. Apr. 28, 1883.


41. [Variations in seedling plants.] By E. L. Sturtevant. May 19, 1883.

42. [Germination tests of wheat.] By E. L. Sturtevant. May 26, 1883.


47. [Seed improvements.] By E. L. Sturtevant. June 29, 1883.


60. [Experiments with insecticides.] By E. L. Sturtevant. Sept. 29, 1883.


64. [Other crops with corn.] By E. L. Sturtevant. Nov. 3, 1883.


69. [Variations in corn due to cross-fertilization.] By E. L. Sturtevant. Dec. 8, 1883.


73. [Flour.] Maize. Jan. 5, 1884 [i.e. 1884].

74. [Oxalis.] Okra. Sturtevant. Jan. 12, 1883 [i.e. 1884].

75. [Sorghum.] Soil and chemical composition. By E. L. Sturtevant. Jan. 19, 1883 [i.e. 1884].

76. [Coal ashes.] By E. L. Sturtevant. Feb. 23, 1883.

77. [Influence of climate upon the action of fertilizer in its relation to crop.] By E. L. Sturtevant. Mar. 8, 1884.

78. [Celery; tomatoes.] By E. L. Sturtevant. Mar. 22, 1884.

79. [Corn analyses.] By E. L. Sturtevant. Apr. 5, 1884.
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83. [Varieties of sweet corn.] By E. L. Sturtevant. Apr. 12, 1884.
84. [Varieties of sweet corn.] By E. L. Sturtevant. Sept. 10, 1884.
85. [Digestibility of corn fodder and the same ensilage.] By E. L. Sturtevant. Apr. 26, 1884.
86. [Corn cutworms.] By J. A. Lintner. May 31, 1884.
88. [Determination for the turnip tansy beetle (Haltica striolata) and the radish fly (Anthomya radicivora).] By E. L. Sturtevant. July 9, 1884.
89. [i.e. 89.] [Cross fertilization of beans.] By E. L. Sturtevant. July 16, 1884.
90. [Bell peppers; corn. (Necktie)] By E. L. Sturtevant. July 22, 1884.
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106. [Influence of salt and putrefactive food upon cows and their milk; Brewers' grains.] By E. L. Sturtevant. Nov. 22, 1884.
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111. [Causes of the failure of corn to germinate.] By E. L. Sturtevant. Mar. 18, 1885.
112. [Experiments with dried seed corn.] By E. L. Sturtevant. Apr. 11, 1885.
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114. [Influence of feeding acid food to cows; Dry feed with acetic acid.] By E. L. Sturtevant. Apr. 25, 1885.
115. [The absorption of the seed tuber of the potato during growth of the plant.] By E. S. Goff. Mar. 15, 1885.

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1. [Mason's high grade potash fertilizer.] By E. L. Sturtevant. July 18, 1885. (No. 116, old series.)
3. [Varieties of vegetables exhibited by the station at the New York State Agricultural Society's fair.] By E. L. Sturtevant. Sept. 10, 1885.
9. [Was it poison or overfeeding.] By E. L. Sturtevant. Mar. 1, 1887.
11. [Experiments in cultivation; experiment in root growth; experiment with fertilizers; experiments with sweet potatoes; experiments with tungstes; experiments with Turbinaria; experiments with the potato; experiments with sorghum.] By E. S. Goff. Sept., 1888.
12. [Digest of the fertilizer laws in several States; statistics of fertilizers; the Maynard bill.] Sept., 1888.
13. [Farm and field experiments.] By F. E. Emery. Sept., 1888.
15. [Methods adopted for the systematic testing of new fruits; a circular to the originators or proprietors of new fruits; a list of fruits now under trial at the station.] By E. S. Goff. Nov., 1888.
20. [Pedigrees of dairy animals under investigation.] By Peter Collier. June, 1890.
23. [Comparative test of cows; loss in keeping manure.] [By F. E. Emery.] Sept., 1890.
27. [The New York State fertilizer control and fertilizer analyses: General principles underlying the use of fertilizers.] By L. L. Van Slyke. Feb., 1891.
30. [Cabbage and cauliflower; tomatoes.] By C. E. Hunn. May, 1891.
31. [Commercial valuation of the food and fertilizing constituents of feeding materials.] By Peter Collier. May, 1891.
32. [The New York State fertilizer control and fertilizer analyses: Description of material used in making commercial fertilizers; fertilizing materials produced on farms; fertilizing composition and valuation of various products.] By L. L. Van Slyke. June, 1891.
33. [The New York State fertilizer control and fertilizer analyses: Explanation of terms of chemical analyses; commercial valuations of fertilizers; composition of various chemical compounds.] By L. L. Van Slyke. July, 1891.
34. [Comparison of dairy breeds of cattle with reference to production of butter.] By L. L. Van Slyke. Aug., 1891.
35. Some of the most common fungi and insects, with preventives. [By C. E. Hunn and G. W. Churchill.] Aug., 1891.
37. Investigation of cheese; experiments in the manufacture of cheese; influence of composition of milk on composition and yield of cheese; a study of the process of ripening of cheese. [By L. L. Van Slyke.] Nov., 1891.
40. Black knot of plum and cherry. [By S. A. Beach.] Mar., 1892.
41. Influence of copper compounds in soil upon vegetation; spraying with fungicides for prevention of potato blight; analyses of materials used in spraying plants. [By S. A. Beach and L. L. Van Slyke.] Apr., 1892.
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46. Experiments in the manufacture of cheese. [By L. L. Van Slyke.] Sept., 1892.
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48. Some bean diseases. [By S. A. Beach.] Dec., 1892.
49. Treatment of potato scab; use of Bordeaux mixture for potato blight. [By S. A. Beach.] Jan., 1893.
50. Summary of results of experiments made in the manufacture of cheese during the season of 1892. [By L. L. Van Slyke.] Jan., 1893.
51. Some celery diseases. [By S. A. Beach.] Mar., 1893.
52. Analyses of commercial fertilizers. [By L. L. Van Slyke.] Mar., 1893.
54. Experiments in the manufacture of cheese: Manufacture of cheese from normal milk rich in fat; study of cheese-ripening process. [By L. L. Van Slyke.] May, 1893.
56. Experiments in the manufacture of cheese: The manufacture of Edam cheese; the manufacture of Gouda cheese. [By L. L. Van Slyke.] May, 1893.
57. Feeding experiments with laying hens; experiments with the laying stock; observations on feather eating; general observations. [By W. P. Wheeler.] June, 1893.
60. Investigation relating to the manufacture of cheese: I. [By L. L. Van Slyke.] Sept., 1893.
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65. Investigation relating to the manufacture of cheese: Summary of the results of the work done in cheese factories during the seasons of 1892 and 1893. [By L. L. Van Slyke.] Jan., 1894.
68. Investigation relating to the manufacture of cheese; V. Fat in milk as a practical basis for determining the value of milk for cheese making. [By L. L. Van Slyke.] Mar., 1894.
70. Some reasons why the legal milk standard of New York State should be changed. [By L. L. Van Slyke.] Apr., 1894.
71. Some reasons why there should be a legal standard for cheese in New York State. [By L. L. Van Slyke.] May, 1894.
72. Preventing leaf blight of plum and cherry nursery stock. [By S. A. Beach.] June, 1894.
73. Analyses of commercial fertilizers collected during the spring of 1894. [By L. L. Van Slyke.] July, 1894.
74. Observations on the application of fungicides and insecticides. [By S. A. Beach and Wendell Paddock.] Sept., 1894.
75. Some insects injurious to squash, melon, and cucumber vines; the asparagus beetle. [By W. H. Lowe.] Sept., 1894.
80. Alfalfa forage for milch cows. The results from rations containing alfalfa and those obtained from some other summer rations. [By W. P. Wheeler.] Nov., 1894.
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82. Results of investigation relating to the manufacture of cheese for the season of 1894. [By L. L. Van Slyke.] Dec., 1894.
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84. Spraying pear and apple orchards in 1894. [By S. A. Beach.] Jan., 1895.
85. Analyses of commercial fertilizers collected during the fall of 1894. [By L. L. Van Slyke.] Jan., 1895.
86. Treatment of common diseases and insects injurious to fruits and vegetables. [By S. A. Beach and Wendell Paddock.] Feb., 1895.
87. The San Jose scale. [By F. A. Sirrine.] Jan., 1895.
88. Forcing lettuce in pots; mushrooms as a greenhouse crop. [By S. A. Beach.] Mar., 1895.
89. Comparative profits derived from selling milk, butter, cream, and cheese. [By L. L. Van Slyke.] Apr., 1895.
90. Feeding experiments with laying hens. A comparison of rations containing moistened ground grain with others containing dry whole grain. [By W. P. Wheeler.] May, 1895.
91. A new strawberry; notes on strawberries, raspberries, blackberries, and dewberries. [By S. A. Beach and Wendell Paddock.] July, 1895.
92. Analyses of commercial fertilizers collected during the spring of 1895. [By L. L. Van Slyke.] Oct., 1895.
93. Comparative field-test of commercial fertilizers used in raising potatoes. [By L. L. Van Slyke.] Oct., 1895.

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96. Results of analyses of commercial fertilizers collected during the fall of 1895. By L. L. Van Slyke. Dec., 1895.

*Bulletins marked with an asterisk were issued in popular form with the same or modified titles.


194*. San José scale investigations: II. Spraying experiments with kerosene oil; methods of combating the San José scale. By V. H. Lowe. Dec., 1900.


239. Thinning apples. By S. A. Beach. Sept., 1903.


265. Plant food constituents used by bearing fruit trees; tabulated analyses showing amounts of plant food constituents in fruits, vegetables, etc. By L. L. Van Slyke, O. M. Taylor, and W. H. Andrews. Apr., 1905.

266. Report of analyses of samples of fertilizers collected by the commissioner of agriculture during the summer and fall of 1904. Apr., 1905.


309. The relation of weather to the setting of fruit; with blooming data for 86 varieties of fruit. By U. P. Hedrick. Mar., 1908.


313. Inspection of feeding stuffs. July, 1907 [i.e. 1908].


347. Publicity and payment based on quality as factors in improving a city milk supply. By H. A. Harding. Apr., 1911.


354. Analyses of materials sold as insecticides and fungicides. May, 1912.


363. Studies in plant nutrition; I. The unlike feeding capacity of different species of agricultural plants; the relationship of the availability of ground phosphatic rock; the fertilizing value of an iron ore sample. By W. H. Jordan. Feb., 1913.

104. Analyses of materials sold as insecticides and fungicides. Apr., 1914.
105. New or noteworthy fruits, II. By U. P. Hedrick. Apr., 1914.
112. Some facts about commercial fertilizers in New York State: Composition of fertilizers and cost of plant-food constituents; relation of guaranteed to actual composition in fertilizers; some defects in the present fertilizer law. By L. V. Van Slyke. Dec., 1914.
123. New or noteworthy fruits, III. By U. P. Hedrick. Apr., 1915.
130. Report of analyses of samples of commercial fertilizers collected by the commissioner of agriculture Oct., 1915.
146. Report of analyses of samples of commercial fertilizers collected by the commissioner of agriculture Oct., 1916.
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TECHNICAL BULLETINS.

3. The action of dilute acids upon casein when no soluble compounds are formed; the hydrolysis of the casein to soluble and insoluble whey. By L. L. Van Slyke and D. D. Van Slyke. Dec., 1909.
4. Some of the first chemical changes in cheddar cheese; the acidity of the water-extract of cheddar cheese. By L. L. Van Slyke and A. W. Bosworth. Apr., 1907.


32. A contribution to the chemistry of phytin: The organic phosphoric acid of cottonseed meal; phytin in oats; phytin in corn; concerning the combination of barium phytate and phytic acid from commercial phytin and a study of the properties of phytic acid and its decomposition products. By R. J. Anderson. Jan., 1914.


40. Concerning the organic phosphorus compound of wheat bran; the hydrolysis of phytin: Inositol triphosphate in wheat bran (eleventh paper on phytin); hydrolysis of phytin by the enzyme phytase (twelfth paper on phytin); hydrolysis of the organic phosphorus compound of wheat bran by the enzyme phytase (thirteenth paper on phytin); phytin in wheat bran (fourteenth paper on phytin). By R. J. Anderson. Jan., 1915.


[Horticultural Monographs]

INDEXES.

NORTH CAROLINA.

North Carolina Agricultural Experiment Station, Raleigh.

BULLETINS.
The first numbered bulletin of this station is 57. The following chronological list of the more important earlier publications is compiled for the most part from several slightly different lists found in publications of the station. (See Bulletin 87.)


Analyses and valuations of fertilizers to May 1, 1883.


The trade in fertilizers during 1883.


Analyses and valuations of fertilizers made up to May 1, 1884. By C. W. Dabney. [1884?]


Analyses of fertilizers for 1885.

Analyses of fertilizers, fall 1885.

Analyses of composts, etc., 1885.

Fall analyses of fertilizers. [1885.]

Injurious insects and diseases of stock. 1885.

Special instructions for voluntary observers and displaymen. By W. O. Bailey. 1886.

What the valuations of fertilizers mean. 1886.


Home-made fertilizers and composts and the ingredients used in them. May, 1888.


62. Fertilizer analyses, partial list; seed examination for planters. Feb., 1889.


74. Fertilizer analyses and the fertilizer control, season of 1890. Feb., 1890.


77. The weed pests of the farm; Japan clover; its value as a renovator of worn soils. By Gerald McCarthy. Apr., 1890.


87. Work of the horticultural division, 1890 Tests of garden vegetables; fruits; ornamental planting; the culture of figs. By W. F. Massey. Dec., 1890.


75. Fertilizer analyses and fertilizer control, season of 1891. Mar. 16, 1891.

75a. [Fertilizer analyses.]

75b. [Fertilizer analyses.]


76. Plant diseases and how to combat them. By Gerald McCarthy. Mar., 1891.


78. Diseases of the horse. By C. B. Michener [and others]. 1890.


80e. Illustrative exhibit at the Southern Exposition, Raleigh, N. C., October and November, 1891. Oct., 1891.

80f. The digestibility of cottonseed hulls; the digestibility of a ration of cottonseed hulls and cottonseed meal; comparison of composition and digestibility of wheat straw and cottonseed hulls; the fertilizing constituents recovered in manure in these experiments. By F. E. Emery and B. W. Kilgore. Oct., 1891.


82. Fertilizer analyses and fertilizer control, with all analyses made in spring and fall of 1891. By H. B. Battle. Jan., 1892.


82c. Growing celery in the South; cultivation of onions; notes on horticultural work during 1891. By W. F. Massey. Feb., 1892.


82i. Some enemies of truck and garden crops. By Gerald McCarthy. Apr., 1892.

82j. The late crop of Irish potatoes in the South. By W. F. Massey. Apr., 1892.


82m. Meteorological summary for North Carolina, April, 1892. By H. B. Battle, C. F. von Herrmann, and Roscoe Nunn. May, 1892.


82q. All publications of the station from March, 1877, to September, 1892. By H. B. Battle. Sept., 1892.


82x. Fertilizer analyses and the fertilizer control; with all analyses made in spring and fall of 1892. By H. B. Battle. Jan., 1893.


9e. Results of chemical analyses of tobacco cured by the leaf-cure on wire and the stalk processes. By F. B. Carpenter. Apr., 1893.


9i. Some experiments in wheat culture. By F. E. Emery. Apr., 1893.


9o. The propagation of orchard and garden fruits, including: The propagation, planting, and culture of fruit trees and fruit-bearing plants, and the preservation and shipping of fruits. By W. F. Massey.—Insects and diseases affecting fruit trees, plants, and fruit, with remedies for their destruction. By Gerald McCarthy. Aug., 1893.


9y. Miscellaneous agricultural topics contained in the press service bulletins [June to December, 1893]. Jan., 1894.


9a0. Some leguminous crops and their economic value including: Legumes as improvers of the soil. By Gerald McCarthy.—The cultivation of leguminous plants for forage. By F. E. Emery.—The fugalious and insect enemies of legumines. By Gerald McCarthy.—The forage plant garden, including full notes taken during growth. By Gerald McCarthy and F. E. Emery. Mar., 1894. The last article, p. 157-170, is not included in all copies of this bulletin.

9a1. The Third World's Fair (Trichina spiralis). By F. E. Emery. Apr., 1894.


9a4. Efforts made to meet the dairy interests of North Carolina through the medium of the State fairs. By F. E. Emery. Aug., 1894.


9aa. Seed testing; its uses and methods. By Gerald McCarthy. Sept., 1894.


9ad. Fertilizer analyses of the fertilizer control, including official analyses of spring and fall samples of 1894. By H. B. Battle. Jan., 1895.


9ah. Miscellaneous agricultural topics contained in press service bulletins July, 1894-Feb., 1895.] June, 1895.


124 BULLETIN 1199, U. S. DEPARTMENT OF AGRICULTURE.


134. Not published.

135. Not published.

136. Fertilizer analyses of the fertilizer control, including official analyses of spring and fall samples of 1896. By H. B. Battle. Jan., 1897.


143. Feeding experiments, milk records, etc. By F. E. Emery. Sept., 1897.


146. Miscellaneous farm bulletin: Variety test of cow peas; germination test of wheat; a variety test of cotton; some experiments with potatoes. By F. E. Emery. Dec., 1897.


150. Medicinal plants which have been collected and used in North Carolina. By G. W. Hyams. June, 1898.


152. Poultry notes: Disease experiments; a feeding experiment with Pekin ducks; Incubator records. By W. F. Massey. Sept., 1898.


156. The adulteration of flour as it is found to exist in samples purchased upon the markets in North Carolina. By W. A. Withers and G. S. Fraps. Dec., 1898.


184. The culture and marketing of orchard and garden fruits. By W. F. Massey. Apr., 1903.


195. Farm poultry. June, 1907.


216. Feeding cottonseed meal to draft animals. By R. S. Curtis. June, 1911.


238. Harvesting tobacco by priming or picking the leaves as compared with cutting the stalks. By E. G. Moss. Aug., 1917.


SPECIAL BULLETINS.

1-15. See regular bulletins 77a, 80a, 80b, 82a, 82b, 83, 86, 86b, 88b, 88a, 89c, 90c, and 91b.

16-27. Contains only fertilizer control work, 1894-1895.


29-47. Contains only fertilizer control work, 1895-1897.


TECHNICAL BULLETINS.

1-7. See regular bulletins 67a, 77b, 80c, 87d, 90a, 90b, and 91d.


NORTH DAKOTA.
North Dakota Agricultural Experiment Station, Agricultural College.

BULLETINS.

17. The effect of seed exchange upon the culture of wheat; distribution of weed seeds by winter winds. By H. L. Bolley. Mar., 1895.
27. New studies upon the smut of wheat, oats, and barley, with a résumé of treatment experiments for the last three years. By H. L. Bolley. Mar., 1897.
38. Cultivation experiment with wheat and a special study of the moisture and temperature of the soil under the Campbell and ordinary treatments. By J. H. Shepperd and A. M. Ten Eyck. Apr., 1899.
47. Humus and soil nitrogen; climatic studies with wheat, oats, and corn; brome and timothy compared; Austrian brome hay. By E. F. Ladd. Mar., 1901.
132. Not published.
133. Not published.

PAINT BULLETINS.


SPECIAL BULLETINS, FOOD DEPARTMENT.

Individual numbers of this series often have no distinctive title, but are made up of items relating to food and drug inspection. Reports of work of more than routine interest are brought out in the following list.


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Vol. III, No. 2. [Miscellaneous items including] Velvet chaff vs. fife and bluestem wheats.—The different types of hard red spring wheat grown in North Dakota from the milling and baking point of view. By Thomas Sanderson.—The rank of velvet chaff among other spring varieties in baking strength and protein content. 1913. [By W. L. Stockman.] Jan., 1914.


Vol. IV, No. 4. [Miscellaneous items including:] May, 1916.
Vol. IV, No. 7. [Miscellaneous items including:] Sept., 1916.
Vol. IV, No. 9. [Miscellaneous items including:] Nov., and Dec., 1916.
Vol. IV, No. 10. [Miscellaneous items including:] Jan., 1917.
Vol. IV, No. 12. [Miscellaneous items including:] The so-called "vitamines" or "food accessories" and their importance in the nutrition of animals. By F. W. Christensen. Apr., 1917.
Vol. IV, No. 13. [Miscellaneous items including some food notes:] What foods can be used in place of potatoes at the same time reduce the cost? How does the food value of skim milk and whole milk company? How much may be saved by using bulk breakfast food as compared with those sold in packages? By R. E. Remington.—Save the potato. By Katherine Jensen. May, 1917.
Vol. IV, No. 15. [Miscellaneous items including:] Aug.–Sept., 1917.
Vol. IV, No. 18. [Miscellaneous items including:] Dec., 1917.

Vol. V, No. 5. [Miscellaneous items including:] May, 1918.
Vol. VI, No. 1. [Miscellaneous items including:] June, 1920.

Note.—Subsequent numbers published by North Dakota Agricultural College, Regulatory Division.

OHIO.
Ohio Agricultural Experiment Station, Wooster.

The Ohio Experiment Station established in 1882 was originally located at Columbus, but was moved to Wooster in 1892; titles of Bulletins 3, 5, 8, and 15 could not be obtained.

BULLETINS, FIRST SERIES.14

2. Test of varieties of wheat, with tables and explanatory notes. By W. R. Lazenby. 1884.
3. Descriptive notes of varieties of winter wheat tested the past season. By W. R. Lazenby. 1884.

14 Bulletins of this series were issued for newspaper use and were afterward incorporated in the first six annual reports.
14. Varieties of potatoes, sweet corn, and cabbage. By W. B. Alwood and W. J. Green. [1885?]

15. Tests of varieties of wheat. [1887?]


BULLETINS, SECOND SERIES.


3. The Tobacco leaf roller treatment of apple trees to prevent insect injuries; experiments with remedies for the plum curculio. By C. M. Weed. May, 1888.


13. (Vol. II, No. 6.) Remedies for the plum curculio; remedies for the striped cucumber beetle; strawberry root fusk and grain plant fungus; notes on little-known injurious insects; preventing the formation of potato rot. By C. M. Weed. Sept., 1889.


19. (Vol. III, No. 4.) Spraying to prevent insect injury; barklice of the apple and pear; the buffalo tree hopper; insects affecting corn; ox warble fly or boilfly; fungous diseases of plants and their remedies. By C. M. Weed.—Directions for collecting, preserving, and studying plants. By Fred Detmers. Apr., 1890.


23. (Vol. III, No. 8.) Plum curculio experiments; remedies for striped cucumber beetle; the rhubarb curculio; the dover stem borer; potato-blight experiments. By C. M. Weed. Sept., 1890.


28. (Vol. IV, No. 2.) Miscellaneous experiments in the control of injury; some common cabbage insects; three important clover insects. By C. M. Weed. Feb., 1891.


34. (Vol. IV, No. 8.) Forty years of wheat culture in Ohio. By C. E. Thorne. Nov., 1891.


40. (Vol. V, No. 4.) Insects which burrow in the stems of wheat. [By F. M. Webster.] Apr., 1892.

41. Announcement concerning the publications of the Ohio experiment station. July, 1892.


55. The damage caused by the pink in Ohio. By A. D. Selby.—Ohio laws relative to weeds, black knot, and yelows. Oct., 1894. See 83.


68. Some destructive insects; spraying with arsenites vs. bees; carnivorous habits of Limax campestris. By F. M. Webster. Feb., 1896.


71. The maintenance of fertility: field experiments with fertilizers; the sources and cost of fertilizing materials; the home mixing of fertilizers. By C. E. Thorne, J. F. Hickman, and W. J. Green.—Comparison of home and commercial fertilizers. By A. D. Selby. Apr., 1896.


73. Investigation of plant diseases in forcing house and garden: Diseases of lettuce; diseases caused by nematodes; leaf mildews—spraying with fungicides under glass; diseases of cucurbits; tomato diseases. By A. D. Selby. Dec., 1896.


76. Potatoes: Cultural notes; variety tests; experiments with fertilizers. By W. J. Green. Feb., 1897.

77. The chinch bug and other destructive insects. By F. M. Webster. Feb., 1897.


79. Some diseases of orchard and garden fruits with spray calendar supplement. By A. D. Selby. Apr., 1897. See 102.


87. The periodical cicada (Cicada septendecim) or so-called seventeen-year locust in Ohio. By F. M. Webster. Nov., 1897.


104. Further studies upon spraying peach trees and upon diseases of the peach. By A. D. Selby. Mar., 1899.


114. Hay insects are studied at the Ohio Agricultural Experiment Station. By F. M. Webster. Jan., 1900.
140. The corn crop. By C. G. Williams. Apr., 1903.
149. The hardy catalpa as a farm crop. By W. J. Green. Mar., 1904.
151. Proceedings of the second annual reunion of the Ohio State Board of Agriculture, the College of Agriculture, Ohio State University, the farmers' institute lecturers of Ohio, and the Ohio Agricultural Experiment Station. June, 1904.
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BULLETIN 1196, U. S. DEPARTMENT OF AGRICULTURE.


322. Feeding experiments with laying hens: Range versus confinement; variety versus simple rations; comparison of tankage and meat scrap; various amounts of protein in rations; different methods of feeding; egg production of early; medium and late hatched pullets; comparison of corn and wheat. By W. J. Buss. Mar., 1918.
329. The peat tree borer (Sanaphiander cocoa Say), order, Lepidoptera, family, Aegeridiæ. By H. A. Gossard and J. L. King. Sept., 1918.

SPECIAL BULLETINS.


TECHNICAL BULLETINS.


MISCELLANEOUS.


INDEXES.

OKLAHOMA

Oklahoma Agricultural Experiment Station, Stillwater.

BULLETINS

27. Glanders; Texas fever; symptomatic anthrax. By L. L. Lewis. June, 1897.
34. The San José scale in Oklahoma. By E. E. Bogue. May, 1898.
41. Supersedes 17.
46. Also popular edition.
60. Reports from Bulletins Nos. 47, 50, and 52, and annual reports 8 to 11 (for the use of settlers). Sept., 1903.
64. Tuberculosis in hogs. By L. L. Lewis. May, 1904.
139


73. Hardy trees, shrubs, and vines suitable for planting in Oklahoma. By O. M. Morris. Apr., 1907.


123. The chicken sticktight flea (Sarcopsylla gallinacea Westw.). By C. E. Sanborn. Feb., 1919. See 130.


129. The four-spotted cowpea weevil (Bruchus quadrirameolatus Fabr.). By Otis Wade. Nov., 1919.

130. The chicken sticktight flea (Sarcopsylla gallinacea Westw.). By C. E. Sanborn. Feb., 1919. A revision of 123.


SPECIAL BULLETIN.

1. History and organization. 


14. A paper dealing with insects; some injurious insects of 1891; the grain beetle (Silvanus auriniventer); a sugar beet beetle (Menesia guttulata): Tent caterpillars; the branch and twig burrower (Polyomena confertus Lecote). By F. L. Washburn. [May], 1891.


18. Insects injurious to young fruit trees; codling moth; kerosene emulsion wireworms; flea beetles. By F. L. Washburn. Mar., 1892.

19. Some Oregon weeds and how to destroy them. By Moses Craig. May, 1892.


29. Notes on vegetables, fruits, pruning, etc. By George Coote. Feb., 1894.


33. Tent caterpillars; the grain plant louse (Simphonopora avenae Fab.); the pear leaf blister: the clover mite Bryobia pratensis Garman; Koebele's reen wash. By F. L. Washburn. Dec., 1894.

34. Fruit to note. Notes on the comparative date of blooming and pollination; varieties of apples, pears, plums, and cherries; notes on vegetables. By George Coote. Feb., 1895.


42. Feeding sheep wheat; (a) pigs, (b) steers; feeding potatoes to pigs. By H. T. French. Mar. 1896.


52. The cultivation of the hazel nut; also notes on varieties of pears and peaches. By George Coote. Apr., 1898.


74. The cultivation of vegetables and notes on varieties. By George Coote. Feb., 1903. See also 77.


77. A continuation of Bulletin 74 on onions; also notes on strawberries and varieties of vegetables. By George Coote. Dec., 1903.


81. The apple in Oregon: I, Early history, earliest varieties later plantings, the problem of planting, site vs. soil, site vs. aspect, selection of trees, planting. By E. R. Lake. July, 1904.


89. Efficiency of seed separators under farm conditions. By I. P. Whitney. Dairy school seed separa-


94. The apple from orchard to market. By C. I. Lewis.—[Hood River Apple Growers' Union. Instructions to packers; constitution, etc.] By E. H. Shepard. Feb., 1907.


139. New facts regarding the periodic occurrence of discharge of the apple scab fungus. By Lercy Cholds. May, 1917.
144. The life history and control of the rose leaf hopper (Empone ranae): An apple pest. By Lercy Cholds. Feb., 1918.
146. Dry farming investigations at the Harney branch station, Burns, Oregon. By L. R. Breithaupt. Feb., 1918.

RESEARCH BULLETIN.


Note.—Series discontinued with No. 3.
The Pennsylvania State College Agricultural Experiment Station, State College.

BULLETINS.

The present series of bulletins was the immediate successor to Bulletins 1-16, 1882-1886, issued by the Pennsylvania State College.


2. Field experiments with phosphates. By H. P. Armsby, Jan., 1888.


33. A test of hand separators. By Harry Hayward, Jan., 1897.


42. Field fertilizer experiments on tobacco. By William Frear, Feb., 1900.


47. The manurial value of the excreta of milch cows. By W. S. Sweetser, Nov., 1900.


49. Methods of dairy feeding. By Harry Hayward, July, 1901.


51. Weed seeds in general; two newcomers into Pennsylvania. By W. A. Buckhout, Mar., 1902.


53. The rearing of calves on milk substitutes. By Harry Hayward, July, 1902.


100. The fertilization of apple orchards. By J. P. Stewart. June, 1910. See 121.
121. The fertilization of apple orchards. By J. P. Stewart. Apr., 1912. Supersedes 100.


153. The fertilization of apple orchards. By J. P. Stewart. May, 1918.


BULLETINS OF INFORMATION.


PORTO RICO.

PORTO RICO AGRICULTURAL EXPERIMENT STATION, MAYAGUEZ.

BULLETINS.


60648°—24—10
10. Mixed foods in cases of fatty appetite in horses and neat stock, including notice of patented and proprietary foods: sore shoulders in horses. By F. E. Rice. May, 1891.
11. The state fertilizer law as it is and as it might be: commercial value of fertilizer stock: analyses of commercial fertilizers: State inspection, 1891; analyses of miscellaneous materials sent on for examination; meteorological summary. By H. J. Wheeler. June, 1891.
14. Notes on the potato scab; notes on the Bordeaux mixture as a preventive of potato scab; notes on the Bordeaux mixture as a preventive of the potato blight; notes on transplanting onions. By L. F. Kinney. Oct., 1891.
45. The loganberry from seed to fruitage. By L. F. Kinney. Apr., 1897.
47. Lime, nitrogen, and soda. Notes on the use of lime, the relative crop-producing power of different forms of nitrogen on acid soils and on soda as a substitute for potash. By H. J. Wheeler. July, 1898.
49. Liming in long-term leases: Is a lack of lime general in Rhode Island soils? By H. J. Wheeler and G. E. Adams. Comparative trials of lime, worked into the soil before seeding and applied as a top dressing afterwards; an observation upon the after effect upon the growth of barley, of the root of the flat pea (Lathyrus sylvestris) By H. J. Wheeler and J. A. Tillinghast. Nov., 1898.
52. The practical bearing of some of the field and pot experiments conducted at this station. By H. J. Wheeler. Apr., 1899.


100. When to spray; formulas and notes on spraying. By A. E. Stéene. May, 1904.


146. The gain in nitrogen during a five-year pot experiment with different legumes. By B. L. Hartwell and F. R. Pember. Dec., 1911.
153. The percentage of total phosphorus in flat turnips as influenced by the amount available in soils. By B. L. Hartwell. Apr., 1913.
156. Studies on fowl cholera: II. The inheritance in rabbits of immunity to infection with the bacterium of fowl cholera. By P. B. Hadley. Apr., 1914.
168. Studies by means of both hot and cold culture of the phosphorus and potassium requirements of the barley plant during its different periods of growth. By F. R. Pember. Jan., 1917.
169. The persistence of lawn and other grasses as influenced especially by the effect of manures on the degree of soil acidity. By B. L. Hartwell and S. C. Damon. Apr., 1917.


183. Field experiments which included the soy bean. By B. L. Hartwell. June, 1920.

SOUTH CAROLINA.

University of South Carolina Agricultural Experiment Station, Columbia.

BULLETINS.


South Carolina Agricultural Experiment Station, Clemson College.

BULLETINS.

3. Table of analyses of commercial fertilizers, season 1890-91, Part 2. Oct., 1891.
8. On the available phosphoric acid and the water-soluble potash in cotton seed meal; on the methods of preparing phosphoric acid for precipitation of the phosphoric acid; on the occurrence of meta-phosphoric acid and pyro-phosphoric acid in cotton seed meal. By M. B. Hardin. Dec., 1892.
34. Sugar beets. By M. B. Hardin [and others]. May, 1898.
35. Analyses of commercial fertilizers. June, 1898.


Analysis of commercial fertilizers. Apr., 1901.


Sweet potato: Effects of potatoes upon the starch content; changes in composition on storing; relative value of different methods of storing. By F. S. Shiver. June, 1901.

Analysis of commercial fertilizers. June, 1901.

San José scale, with a few suggestions for its treatment, and rules and regulations adopted by the State board of entomology. July, 1901.


Analyses of commercial fertilizers. Apr., 1902.


Analysis of commercial fertilizers. June, 1902.


Analyses of commercial fertilizers, season of 1902-3 [Part II]. By M. B. Hardin. Apr., 1905.


Analyses of commercial fertilizers, season of 1902-3, June, 1903.


Commercial fertilizers. Summary of analyses for 1902-03; comparison with results of previous years; remarks on cottonseed meal. By M. B. Hardin. Apr., 1904.

Tobacco culture in South Carolina. By T. B. Young. May, 1904.

Analyses of commercial fertilizers, season of 1902-3, Apr., 1904.


Sanitary conditions in the home and on the farm. By Haven Metcalf. May, 1904.


Coast experiments; report of progress. Aug., 1904.

Analyses of commercial fertilizers, season 1903-4, II. By M. B. Hardin. Aug., 1904.


Analyses of commercial fertilizers. Jan., 1905.


Analysis of commercial fertilizers. Feb., 1905.

Analyses of commercial fertilizers. Feb., 1905.

Analysis of commercial fertilizers. Feb., 1905.

Analyses of commercial fertilizers. Feb., 1905.

Analyses of commercial fertilizers. Feb., 1905.

Analyses of commercial fertilizers. Feb., 1905.

Analyses of commercial fertilizers. Feb., 1905.

Analyses of commercial fertilizers. Feb., 1905.

Analyses of commercial fertilizers. Mar., 1905.

Analyses of commercial fertilizers. Mar., 1905.

Analyses of commercial fertilizers. Mar., 1905.


Analyses of commercial fertilizers. Mar., 1905.

Analyses of cotton seed meals. Mar., 1905.

Analyses of commercial fertilizers. Mar., 1905.

Analyses of commercial fertilizers. Apr., 1905.

Analyses of commercial fertilizers. Apr., 1905.

Analyses of commercial fertilizers. Apr., 1905.

Analyses of commercial fertilizers. Apr., 1905.

Analyses of commercial fertilizers. Apr., 1905.

Analyses of commercial fertilizers. Apr., 1905.

Analyses of commercial fertilizers. Apr., 1905.

Analyses of commercial fertilizers. Apr., 1905.


Analyses of commercial fertilizers, season of 1904-5. By M. B. Hardin. May, 1905.


Analyses of commercial fertilizers. May, 1906.


Forage crops grown at Coast Land Experiment Station. By W. D. Garrison. May, 1906.


134. **The San José scale.** By A. F. Comadri. Jan., 1908.
136. **The manufacture of starch from sweet potatoes.** By C. C. McDonnell. Apr., 1908.
138. **Analyses of commercial fertilizers.** By M. B. Hardin. June, 1908.
139. **Mistletoe (Phoradendron leucarpum) its prevention and successful treatment.** June, 1908.
140. **Some conditions influencing cotton production.** By C. L. Newman. June, 1908.
146. **Sweet potato work in 1909.** By T. E. Keitt. Apr., 1909.
147. **Analyses of commercial fertilizers.** By M. B. Hardin [and others]. June, 1909.
149. **Fall and winter cabbages.** By C. C. Newman. Apr., 1910.
150. **Farm management for controlling field crop insects.** By A. F. Comadri. June, 1910.
155. **Corn and cotton wireworm (Hisorionotus curius Say).** By W. A. Thomas. Mar., 1911.
156. **The formation of sugars and starch in the sweet potato.** By T. E. Keitt. June, 1911.
158. **Cotton wireworm (Melanotus curvaticollis).** By A. F. Comadri. June, 1911.
159. **A chemical study of certain sandhills soils of South Carolina.** By T. E. Keitt. June, 1911.
160. **Analyses of commercial fertilizers.** By R. N. Brackett [and others]. Sept., 1911.
161. **The southern corn-right worm in South Carolina (Diabrotica Superlata Oliv.).** By W. A. Thomas. Mar., 1912.
164. **Cotton anthracnose.** By H. W. Barre. Apr., 1912.
165. **Sweet potato investigation.** By T. E. Keitt. June, 1912.
171. **Analyses of commercial fertilizers.** By R. N. Brackett [and others]. Sept., 1912.
172. **Analyses of commercial fertilizers.** By R. N. Brackett [and others]. Sept., 1913.
176. **Practical orchard pruning.** By E. J. Crider. Apr., 1914.
177. **Analyses of commercial fertilizers.** By R. N. Brackett [and others]. Sept., 1914.
179. **The spotted click beetle (Monocrepilus vespertinus Feb.).** By A. F. Comadri and H. C. Easgerton. Dec., 1914.
180. **Corn and cotton wireworm (Hisorionotus uhertii Horn).** By A. F. Comadri and H. C. Easgerton. Dec., 1914.
181. **Analyses of commercial fertilizers.** By R. N. Brackett [and others]. Nov., 1915.
188. **A new, rapid, and accurate method for estimating lime and potash in soils.** By T. E. Keitt and C. J. King. [1917]
191. **Results of fertilizing experiments with cotton at the Clemson College Station.** By T. E. Keitt. Aug., 1917.
193. **Results of fertilizing experiments conducted at the Pee Dee station.** By T. E. Keitt. Dec., 1917.
194. **Analyses of commercial fertilizers.** By R. N. Brackett [and others]. Sept., 1917.
196. **A chemical process of peeling peaches.** By C. C. Newman and Benjamin Freeman. June, 1918.

**INDEXES.**

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BULLETS.

SOUTH DAKOTA.

South Dakota Agricultural Experiment Station, Brookings.

BULLETS.

Bulls, 1-15, 1887-1889, are bulletins of the Dakota Agricultural College and Experiment Station.

2. Organization [results of first season's work with field crops.] By Luther Foster. Apr. 1888.
17. Small grain. By Luther Foster. Mar., 1890.
21. Small grain. By Luther Foster, Feb., 1891.
31. Department of Meteorology. May, 1892.
SOUTH DAKOTA.


130. Some new fruits originated from the native sand cherry and plum in the department of horticulture. By N. E. Hansen. June, 1911.


159. Progress in plant breeding: New fruits (plum, sand cherry, crab apple, raspberry); a new rose; pears immune to blight; a field method of hybridizing alfalfa. By N. E. Hansen. Apr., 1915.


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TENNESSEE.

Tennessee Agricultural Experimental Station, Knoxville.

BULLETINS.


An agricultural experimental station was organized as a department of the University in 1882. Previous to the reorganization of the station in 1887, Bulletins 1-8, 1883-1886, were published.


102. The rational improvement of Highland rim soils: Conclusions from six years of field experiments with various farm crops. By C. A. Mooers. Jan., 1914.


104. Feeding beef cattle: Conclusions from four years of experiments at the West Tennessee Experiment Station. By C. A. Willson and S. A. Robert. Apr., 1914.


The hog louse (Haematopinus suis (Linnaeus) Leach). By H. R. Watts. July, 1918.

Planting and spraying the home orchard and vineyard. By G. M. Bentley. Dec., 1918.


SPECIAL BULLETINS.


TEXAS.

Texas Agricultural Experiment Station, College Station.

BULLETINS.

1. Plan of organization. [1888].

2. Experiments started: Experiments in cattle feeding; analyses of fertilizers and ores; horticultural department; meteorological department. By F. A. Gulley [and others]. May, 1888.


11. Effect of cottonseed and cottonseed meal on better lamb; quality of sweet cream butter as compared with butter made from acid cream. By G. W. Curtis. Aug., 1890.


15. Influence of climate on the composition of corn; digestibility of southern foodstuffs (cottonseed hulls, corn fodder); ash analyses; roasted cottonseed. By H. H. Harrington. May, 1891.

16. Work in horticulture: Drainage experiments; Russian fruits and ornamental trees: list of fruits on trial; forest trees successful to date. By S. A. Beach. June, 1891.

17. General information relating to the Texas Agricultural Experiment Station. By G. W. Curtis. Aug., 1891.

18. Liver flukes: The common fluke (Distomum hepaticum); a new species (Distomum texanum). By Mark Francis. Oct., 1891.


30. Veterinary science: Glanders experiments; tuberculin experiments; lumpy jaw of cattle: notes on parasites; Texas fever experiments; devices for destroying ticks. By Mark Francis. Mar., 1894.


34. Field experiments at McKinney substation and Whita Falls substation with wheat, corn, cotton, grasses, and forage grasses; experiments at College Station with corn, cotton, grasses, peas, and manures. By J. H. Connell and James Clayton. Feb., 1895. See 45.


37. Sun-fired articles compiled from "Miss Notes" published during the years 1894 and 1895. By J. H. Connell [and others]. Dec., 1895.


64. Insect pests attacking truck crops. By F. W. Mally. Apr., 1902.
71. Irish potatoes: Results of experiments at Troupe substation, Smith County. By E. C. Green. Apr., 1904.
87. The San Jose scale. By A. F. Conradi. [Nov., 1906].
89. Insects of the garden. By A. F. Conradi.—The melon louse and other aphids. By C. E. Sanborn. [Dec., 1905].
93. The sweet potato borer. By A. F. Conradi. [1907].
98. Nos. 1 to 23, inclusive. August, 1907.
103. Forage crops in northwest Texas. By A. B. Conner. [1908.]
105. Notes on forest and ornamental trees on the grounds of the Agricultural and Mechanical College of Texas. By Helge Ness. June, 1908.
111. Steer feeding experiments: Kaffir corn, milo maize and molasses compared with Indian corn for fattening cattle; cottonseed meal compared with cottonseed meal as a supplement to cotton for fattening cattle. By C. Burns. Sept., 1908.
120. Corn and cotton experiments for 1912. By W. L. Wolborn. [1909.]
126. Active phosphoric acid and its relation to the needs of the soil for phosphoric acid in pot experiments. By G. S. Fraps. Nov., 1909.
137. Alfalfa in northwest Texas. By A. B. Conner. [1911?]
140. Commercial fertilizers in 1910-11. By G. S. Fraps. [1911?]
144. The culture of cigar leaf tobacco in Texas. By Otto Olson. 1912.
147. Digestion experiments with Texas hays and fodder. By C. S. Fraps. Apr., 1912.
151. Relation of the total nitrogen of the soil to its needs as shown in pot experiments. By G. S. Fraps. Aug., 1912.
159. Steers fed cotton meal, and cottonseed meal compared with cottonseed for fattening cattle; sorghum hay compared with cottonseed hulls for fattening cattle. By J. C. Burns, C. N. Kennedy, and C. S. Scharff. July, 1913.
166. Digestion experiments with Texas feeding stuffs. By G. S. Fraps. May, 1914.
258. The setting iron vs. the knife for docking or detailing lambs. By J. M. Jones and C. M. Hubbard. Apr., 1920.
13. Feeding hay and grain mixed to horses; feeding cut hay vs. whole hay to horses. By J. W. Sanborn. May, 1892.
29. Irrigation—amount of water to use; relative feeding values of timothy, lucerne and wild hay. By J. W. Sanborn. May, 1894.
35. Steer feeding: The value of straw and grain as a substitute for hay; short spring periods of grain feeding; relative value of ensilage, roots, and straw as condiments; value of different grain rations. By A. A. Mills. Aug., 1894.
43. Dairy herd record for 1894-95; winter feeding experiments with dairy cows; some suggestions on the building and equipment of factories. By F. B. Linfield. May, 1896.
54. Cattle feeding; Comparison of Utah feeding stuffs. By Luther Foster and L. A. Merrill.—Digestion experiments with shredded corn fodder, lucerne, timothy, and wheat bran. By J. A. Widtsoe. Feb., 1898.
128. Blooming periods and yields of fruit in relation to minimum temperatures. By A. B. Ballantyne
Nov., 1913.
129. Coding moth studies in 1911: The driving spray under excessively wormy conditions. By E. D.
Ball and W. M. Ball. Nov., 1913.
130. The change in weight of grain in arid regions during storage. By F. S. Harris and George Thomas.
Jan., 1914.
133. Irrigation and manuring studies: [I] The effect of varying quantities of irrigation water and manure
134. The nitric nitrogen content in the country rock. By Robert Stewart and William Peterson. June,
1914.
135. A study in annual egg production based on the records of a flock of seven-year-old hens and their
139. The summer pruning of a young bearing apple orchard. By L. D. Batchelor and W. E. Goodspeed.
Nov., 1915.
140. Variations in minimum temperatures due to the topography of a mountain valley in its relation to fruit
142. Fruit tree root systems: Spread and depth as partly determined by excavations on the southern
144. Soil alkali studies: Quantities of alkali salts which prohibits the growth of crops in certain Utah soils.
By F. S. Harris. Sept., 1916.
to "winter" egg production. By E. D. Ball and Byron Alder. Jan., 1917.
149. Further studies of the nitric nitrogen content of the country rock. By Robert Stewart and William
Peterson. May, 1917.
151. The effect of soil moisture content on certain factors in wheat production. By F. S. Harris and H. J.
Maughan. Feb., 1917.
153. Irrigation and manuring studies: II, The effect of varying quantities of irrigation water and manure
154. The beet leafhopper Eutettix tenella Baker] and the curly-leaf disease that it transmits. By E. D.
Ball. June, 1917.
161. A quick method of obtaining accurate individual egg records without the trap nest. By Byron
164. Labor costs and seasonal distribution of labor on irrigated crops in Utah Valley. By L. G. Conner.
Oct., 1918.
170. Alfalfa seed growing and the weather; with particular reference to conditions in Utah. By J. C.
June, 1920.

VERMONT.

Vermont Agricultural Experiment Station, Burlington.

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7. [Conference on the Hatch act. Mar., 1888.]
28. Potato blight and rot; a new potato disease; potato scab; apple and pear scab; oat smut. By L. R. Jones. Apr., 1892.
38. Annual report of the director. II. By W. W. Cooke. 1893.
56. Change our hawkweed, or "paint brush." By L. R. Jones and W. A. Orton. Feb., 1897.


144. Feeding stuffs inspection: Concerning commercial feeding stuffs; concerning the manufacture and natural feeds; the economics of feed purchase; the formation of grain ration. By J. L. Hills, C. H. Jones, and P. A. Benedict. Aug., 1909.


147. The bacterial soft rots of certain vegetables; the mutual relationships of the casual organisms. By H. A. Harding and W. J. Morse.—Pectinase, the cytoplasmic enzyme produced by Bacillus carotovorus and certain other soft-rot organisms. By L. R. Jones. Dec., 1909.


159. Plant diseases; twenty years' spraying for potato diseases; potato diseases and the weather. By E. P. Lutman. May, 1911.


177. Large seed a factor in plant production. By M. B. Cummings. Feb., 1914.


S U M M A R I E S.

Condensed outlines of articles published in Reports 1-19, Bulletins 1-133, 1887-1907. (Vermont Sta. Rpt., 20 [1906-07], p. 357-565.) Summaries arranged by topics with references to original publication.

VIRGINIA.

Virginia Agricultural Experiment Station, Blacksburg.

BULLETINS.

1. Application of fertilizers to wheat. 1889.
40. Ripe rot, or bitter rot, of apples. By W. B. Alwood. May, 1894.
48. Evaporating apples. By W. B. Alwood. Jan., 1895 [i.e. 1896].
49. Pear culture. By W. B. Alwood. Feb., 1896. [i.e. 1895.]
60. Experiment garden notes, Pt. II. By W. B. Alwood. Jan., 1896.
63. Laboratory tests of creolin as a disinfectant. By F. S. Roop. Apr., 1896.
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74. Legislation for the suppression of the San José scale; summer treatment for the San José scale. By W. B. Alwood. Mar., 1897.
76. The cattle tick in Virginia. By E. P. Niles. May, 1897.
83. Index to preceding bulletins. Dec., 1897.
100. Orchard technique: IV. Spraying the orchard. By W. B. Alwood. May, 1899.
116. The teeth of the horse as affected by age, Pt. II. By Charles McCulloch. Sept., 1900.
120. The most common irregularities of the teeth of the horse. Pt. II. By Charles McCulloch. Jan., 1901.
130. Orchard studies: III. Notes on some of the more important varieties of apples. By W. B. Alwood. Nov., 1901.
137. Orchard studies: X. A consideration of the commercial handling of cider fruit; grinding and expressing the must. By W. B. Alwood. June, 1902.
185. The production of clean and sanitary milk: Results of experiments to determine the number of bacteria in milk produced under different conditions, and their significance. By W. K. Brainerd. Sept., 1909.


TECHNICAL BULLETINS.


WASHINGTON.

Washington Agricultural Experiment Station, Pullman.

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5. Report of farmers' institute held at Pomory, Wash., May 15, 1892. [By George Lilley and others.] 1892.


17. Insect pests of the garden, farm, and orchard. By C. V. Piper. 1895.


Some notes concerning the nitrogen content of soils and humus. By Elton Fulmer, Oct., 1896.


Correction of Babcock test for cream; effect of richness of cream on acid test. By W. J. Spillman. [1897?]


Fish scrap fertilizers. By W. H. Heleman. 1900.


The variegated cutworm. By R. W. Doane and D. A. Brodie. 1901.

A manometric ration computer. By W. J. Spillman. 1901.


Wheat Fusel. By Elton Fulmer. 1902. Also Popular Bul. 7.


Home vegetable garden in the Palouse country. By S. W. Fletcher. 1903.


Root diseases of fruit and other tree causes by toadstools: Root rot caused by Armillaria mellea: root disease caused by Armillaria mellea var. By C. V. Piper and S. W. Fletcher. 1905.


A report on irrigation conditions in the Yakima Valley. By O. L. Waller. 1904.

The raspberry cane maggot. By W. H. Lawrence. 1904.

The raspberry root borer or the blackberry crown borer. By W. H. Lawrence. 1904.


Three common insect pests of western Washington: The oyster-shell bark louse; the wooly aphid of the apple; the pear and cherry slug. By W. H. Lawrence. 1904.


Some notes concerning Halphen's test for cottonseed oil: reaction of land from cottonseed-meal-fed hogs with Halphen's reagent; effects of feeding cottonseed meal upon the health of animals. By Elton Fulmer. 1905.


Preliminary report on the codling moth in the Yakima Valley. By E. L. Jenne. 1905.


The chemical composition of Washington forage crops. (First report.) By R. W. Thatcher. 1905.

Feeding wild plants to sheep. By S. B. Nelson. 1905.

Two insect pests of the elm. By A. L. Melander. 1906.


The codling moth in the Yakima Valley. By A. L. Melander and E. L. Jenne. 1906. Also Popular Bul. 5.

The goat industry in western Washington. By D. A. Brodie. 1906.


The codling moth in eastern Washington. By A. L. Melander and E. L. Jenne. 1907. Also Popular Bul. 5.


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96. Yellow mottle or yellow squash. By G. W. Lawrence. 1910.
103. Wheat and flour investigations: A basis for selection of desirable seed for breeding improvement of nitrogen content; the distribution of nitrogen in different parts of a wheat spike. By R. W. Thatcher, 1911.
112. A report of the investigations concerning the chemical composition of wheat, 1906 to 1912, inclusive. By R. W. Thatcher, Sept., 1913. See also Popular Bul. 68.
120. First annual progress report, first year of demonstration and experiment for the year ending Dec. 31, 1914. [By I. D. Cardiff.] Jan., 1915.
121. First annual report, bureau of farm development for the year ending December 31, 1914. [By I. D. Cardiff.] Jan., 1915.
152. The wind dissemination of the spores of bunt or smutting smut of wheat. By F. D. Heald and D. C. George. Dec., 1918.
153. Not published.
44. Some problems in soil fertility. By George Severance. Apr. 1, 1912.
45. The control of the codling moth. By A. L. Melander. Apr. 1, 1912.
46. Silos and sludge. By R. C. Ashby. June 1, 1912.
51. Spraying calendar for 1913: Pests and diseases of the apple, pear, peach, plum, cherry, etc. By A. L. Melander and H. B. Humphrey. (Feb., 1913.)
52. Causes of variation in per cent of fat of market cream from farm separators. By V. R. Jones. May 19, 1913.
58. Spraying calendar for 1914: Pests and diseases of the apple, pear, peach, plum, cherry, etc. By J. G. Hall and M. A. Yothres. [Jan., 1914.]
113. Potatoes, increase the yield by (1) better cultural methods, (2) the control of diseases, (3) the control of insects, (4) by R. J. Barnett, F. D. Headl, and A. L Melander. Apr., 1918.

BULLETINS, SPECIAL SERIES.


INDEX TO BULLETIN SERIES.

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WEST VIRGINIA.

West Virginia Agricultural Experiment Station, Morgantown.

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6. Six months' experience in running a creamery: improved process of handling cream and churning. By J. A. Myers. 1890.
7. Experiments upon wheat; experiments upon fruit trees; experiments upon garden seeds, etc.; experiments upon grasses and forage crops; experiments upon miscellaneous subjects. By J. A. Myers. 1890.
10. Meteorological report for August; reports of correspondents upon meteorology and crops for August. By J. A. Myers [and others]. Aug., 1890.
11. Meteorological report for September; reports of correspondents upon meteorology and crops for September. By J. A. Myers [and others]. Sept., 1890.
14. Farm and garden insects and experiments with remedies; notes of the season. By A. D. Hopkins. Feb., 1891.


17. Preliminary report: Black spruce. (Forest and shade tree insects, II.) By A. D. Hopkins. May, 1891.

18. Law and regulations concerning the sale of commercial fertilizers in the State of West Virginia; analyses. By J. A. Myers. Sept., 1891.


22. Your weeds and your neighbor's: Distribution of our weeds; bad points of weeds as fodder for stock; chemical weed exterminators. By C. F. Millsapgh. Feb., 1892.

23. Your weeds and your neighbor's: Illustrated descriptive list of weeds. By C. F. Millsapgh. May, 1892.


30. Address and notes on sheep. By A. D. Hopkins. 1893.


44. Primitive entomology: Insects injurious to farm and garden crops, the character of the injury, the insect causing it, the remedy, briefly and plainly stated. By A. D. Hopkins and W. E. Rumsey. Apr., 1896.


82. Peach growing in West Virginia. By K. C. Davis. Apr., 1902.
BULLETIN 1192, U. S. DEPARTMENT OF AGRICULTURE.


166. Certain characteristics of hen eggs. By Horace Atwood and C. E. Weakley, Jr. Sept., 1917.


SPECIAL BULLETINS.

[1.] Potash and paying crops [compiled by A. de Ghequler. 1890. Identical with Georgia Sta. Bul. 9; Maryland Sta. Special Bul. [B]; Tennessee Sta. Special Bul. D.

2. Proceedings connected with the celebration upon the completion of the station building and the organiza- tion of the Sheep Breeders and Wool Growers Association, the State Horticultural Society, and the State Dairy Association, Apr. 5, 1894, 1895.


WISCONSIN.

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BULLETINS.


2. Amount and condition of seed corn in Wisconsin. Apr., 1884.

3. Composition and digestibility of fodders. June, 1884.


5. Analyses of feeding stuffs. Apr., 1885.


18. The constitution of milk and some of the conditions which affect the separation of cream. By S. M. Babcock. Jan., 1888.


32. Feeding grain to lambs; cottonseed meal compared with oil meal for feeding lambs. By J. A. Craig. July, 1892.


34. Preventive treatment for apple scab, downy mildew, and brown rot of grape, potato blight and smut of wheat and oats. By E. S. Goff. Jan., 1893.

35. Insect and disease injurious to cranberries. By E. S. Goff. Apr., 1893.


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43. The agricultural, horticultural, and livestock features of a portion of Wisconsin tributary to Superior:

The agricultural possibilities of Douglas County and northwest Wisconsin. By F. H. King.
Horticultural possibilities of northwest Wisconsin. By E. S. Goff.—Dairy and sheep farming

44. Pasteurization of milk and cream for direct consumption. By H. L. Russell. Apr., 1895.

52. A comparison of the Babcock test and the gravimetric method of estimating fat in skim milk; the
1896.
58. The rape crop: Its growth and value for soiling and fattening sheep and swine. By J. A. Craig. Apr.,
1897.
59. The construction of silos and the making and handling of silage. By F. H. King. May, 1897.
60. The cheese industry: Its development and possibilities in Wisconsin. By S. M. Babcock and H. L.
Russell. May, 1897.

63. The culture of native plums in the northwest. By E. S. Goff. Oct., 1897. See also 57.
68. One year’s work done by a sixteen foot geared windmill. By F. H. King. June, 1898.
70. Construction of cheese curing rooms for maintaining temperatures of 58° to 68° F. By F. H. King.
Jan., 1899.
77. Effects of the February freeze of 1899 upon nurseries and fruit plantations in the Northwest. By E. S.
Goff. Aug., 1899.
85. Development and distribution of nitrates and other soluble salts in cultivated soils. By F. H. King
89. The law regulating the sale and analysis of concentrated feeding stuffs in Wisconsin. By W. A.
Henderson. Sept., 1901.
1902.
92. Licensed fertilizers and concentrated feeding stuffs, 1902. By F. W. Woll and Alfred Vivian. Feb.,
1902.
May, 1902.
Aug., 1902.
95. Some observations on sheep breeding from the experiment station flock records. By W. L. Carlyle
Feb., 1903.
July, 1903.
102. Studies in milk production based on records of cows in the university dairy herd, 1898–1903. By
1903.
104. The food requirements of pigs from birth to maturity. By W. L. Carlyle. Sept., 1903.
110. Spraying fruit trees, with notes on the common insects and fungus diseases infesting orchards. By E. F. Sandsten. Apr., 1904.
137. Conditions which affect the time of the annual flowering of fruit trees. By E. P. Sandsten. Apr., 1906.
140. Development of factory dairying in Wisconsin, with map showing location of cheese factories and creameries. [accompanied by a separate folded map.] By H. L. Russell and U. S. Baer. Sept., 1906.
143. The spread of tuberculosis through factory skim milk with suggestions as to its control. By H. L. Russell. Feb., 1907.
159. The cranberry insects of Wisconsin. By C. E. Hardenberg. May, 1908.

**Research Bulletins.**

The utilization of phosphate by agricultural crops, including a new theory regarding the feeding
42. Farm tenancy: An analysis of the occupancy of 500 farms. By C. J. Galpin and Emily F. Hoag.
Feb., 1919.
43. The common cabbage worm in Wisconsin (Ponita rapae Linn.). By H. F. Wilson, R. C. Pickett,
46. Fusarium resistant qualities of Wisconsin grown wheats. By L. R. Jones, J. C. Walker, and
47. Influence of rations restricted to the oat plant on reproduction in cattle. By E. B. Hart, Harry

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WYOMING.

Wyoming Agricultural Experiment Station, Laramie.

BULLETINS.

1. The organization and the proposed work of the station. [By Dice McLaren and others.] May, 1891.
Buffum. Feb., 1892. Parts not issued separately.
Agr., Bur. Anim. Indust., Special Report on Diseases of Cattle and on Cattle Feeding, 1892,
p. 439-479.
14. Geology of Wyoming experimental farm and notes on mineral resources of the State. By W. C.
By E. E. Slosson.—Garden vegetables and tobacco: progress report on fruits and trees; meteorology
19. Squirrel-tail grass (fox-tail), one of the stock pests of Wyoming. By Aven Nelson. Sept.,
1894.
20. The arsienic wells of southern Wisconsin: their history and relation to irrigation. By J. D. Conley.
Oct., 1894.
22. Onions; crop report, 1894; cost and profit of growing wheat; small fruits at Laramie. By B. C.
Buffum. Apr., 1895.
25. Results of three years’ experiments in cost and profit of growing wheat. By B. C. Buffum. Nov.,
1895.
44. Alfalfa as a fertilzer. By B. C. Buffum. Apr., 1900.
apanied by a folded map.
47. Lamb feeding experiment. By Luther Foster. Apr., 1901.
64. Feeding experiments with lambs. 1905. By B. C. Buffum. Feb., 1905.
91. The relation of the sheep-tick flagellate (Oribothellula melophagia) to the sheep's blood. By L. D. Swingle. Dec., 1911.
103. Corn versus barley in lamb rations: methods of feeding barley to lambs. By A. D. Faville. [1914?]
120. The chemical examination of three species of larkspurs (Delphinium barbeyi, Delphinium glaucanum, Delphinium geyeri). By O. A. Beath. June, 1919.


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ORGANIZATION OF THE
UNITED STATES DEPARTMENT OF AGRICULTURE.

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