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ALABAMA

Agricultural Experiment Station

OF THE

AGRICULTURAL AND MECHANICAL COLLEGE,

AUBURN.

CO-OPERATIVE SEED TESTS.

ALEX. J. BONDURANT.

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CO-OPERATIVE SEED TESTS.

The Department of Agriculture at Washington, directed that the names of farmers in different sections of the State should be furnished by the Agricultural Department of this Station to conduct co-operative experiments with seed. The names of fifty farmers living in different parts of the State, in accordance with this request, were sent to the Department at Washington, the seed were sent direct from Washington, the reports were forwarded to the Station on blanks furnished to the experimenters, and this Bulletin is a report of these experiments.

REPORT OF Mr. L. C. ADAY,

NEWBURGH, FRANKLIN COUNTY.

Cotton—Egyptian Afifi.—Level red loam soil with red clay sub-soil, manured heavily; culture thorough. Planted April 10th. First open August 25th. Yield 732 lbs. per acre. Quality good; growth vigorous, but the yield poor as the bolls are too small.

Cotton—Bamia Egyptian.—Soil, same as above, manured same as above, and same culture. Planted April 10th. First open August 30th. Yield about 600 lbs. per acre. Quality good; growth vigorous and large, but the bolls are too small for it to be a desirable cotton.

White Millo Maize.—Soil as above, no manure. Land ridged, seed planted and plowed four times. Planted April 25th; harvested September 13th. Quality good; yield very good, and growth good.

Yellow Millo Maize.—Conditions same as for the white, but the yield was less and the quality of product not so good.

Red Kaffir Corn.—Level loam soil, no manure. Land

ridged and plowed four times after seeding. Planted April 25th; harvested September 13th. Quality good; growth vigorous and yield good.

Sweet Clover.—Planted March 13th, and was killed by freeze on March 25th while in the sprout.

Alfalfa.—Planted March 13th, and was killed by freeze on the 25th while the seed were in the sprout.

Awnless Brome Grass.—Planted March 13th, and killed on the 25th in sprout.

Spurry.—Same result as with the Awnless Brome.

Crimson Clover.—Same result as with Sweet Clover.

REPORT OF Prof. H. BENTON,

UNIONTOWN, PERRY COUNTY.

Tobacco, Hester.—Black soil, well drained, fertilized with compost. Shallow culture with sweep. Planted May 15th; harvested September 29th. Yield good; growth large; quality of product coarse. Insect enemies, *Macrosila Carolina*. (Linn.)

Tobacco, Havana Seed Leaf.—Soil same as above, fertilized, planted and gathered same as above. Yield fair; growth good; quality of product good. Insect enemies, *Macrosila Carolina*. (Linn.)

Tobacco, Connecticut Seed Leaf.—Conditions of planting, culture and harvest same as the foregoing. Yield good; growth good, and quality fairly good. Insect enemies, same as above.

Red Kaffir Corn.—Decomposed lime rock soil on hillside. Manured with stable manure. Culture, shallow with sweep. Planted April 3rd. Gathered August 30th to October 16. Yield not quite so large as sorghum; quality good; growth good.

Cauliflower.—Soil, well-drained red prairie, heavily manured with compost. Planted seed in beds, set out plants in April; growth poor, quality poor, and yield about nothing. Not suited for this climate; insect enemies, *Pieris rapae* (Schran.)

Onion—Prize Taker.—Soil same as above, manured with kainit, cotton-seed meal and stable manure composted. Cultivated with hoe and plow. Planted March 16, harvested September 29. Quality good; average yield. Growth and yield would have been better but for drought.

Sugar Beet.—Soil as above, manured with compost; cultivated with hoe and plow. Quality good; average growth, and yield good.

Turnip—Golden Ball.—Soil as above, manured same as onions. Cultivated around plants with hoe and rake. Planted March 19. Quality of product excellent; growth good and yield good; turnips large.

Lathyrus Sylvestris.—Seed did not germinate.

Spurry.—Seed did not germinate.

Yellow Millo Maize.—Soil, decomposed lime rock, hill side; fertilized with stable manure. Culture shallow, with Hartselle sweep. Planted April 3d; harvested from August 30th, to October 16th. Quality fairly good; growth good; yield poor on account of poor stand.

White Millo Maize.—Same report as for the yellow.

Bromus Indicus.—Seed did not germinate.

Cotton; Kuypan, India Cotton.—No. 1. Soil, black cotton land; culture, shallow with sweep. Planted April 9th; harvested last of November. Quality poor; growth, large stalks; yield very poor; staple short, and is inferior to any of our native varieties. Insect enemies, boll worm; plant diseases, rust. Professor Benton says the yield was too poor to take the trouble to record.

Cotton; India No. 2.—Soil same as the foregoing, and culture the same. Quality poor; growth of stalk very large; yield too little to record; staple very short. Insect enemies, boll worm; plant diseases, rust.

Cotton; India No. 3; Bourbon.—Same as Nos. 1 and 2 in all respects.

Cotton; India, Nagpur Jari, No. 4.—Quality of product poor; yield almost nothing.

Cotton; Painaa, White India Cotton, No. 5.—Poor. See Nos. 1 and 2 for report.

Cotton; India No. 6.—Poor. See Nos. 1 and 2 for report.
Cotton; Desila Koposh, India No. 7.—Poor. See Nos. 1 and 2 for report.

Cotton; Desila Bango, India No. 8.—Poor. See Nos. 1 and 2 for report.

Cotton; Niurari Bani L. S. Kopas, India.—Poor. Nos. 1 and 2 report.

Cotton; Huigumbot Bani, L. S. Kopas; India.—Poor. See Nos. 1 and 2 for report.

Cotton; Chuidwan Jari, India.—Poor. See 1 and 2 for report.

Cotton; Karunganni, India.—Poor. See Nos. 1 and 2 for report.

Tomato; Matchless.—Soil black and well drained; fertilized with compost. Plants set April 4th. Quality good; growth large; yield large. Insect enemies, *Macrosila Carolina*. (Linn.)

Tomato No. 175.—Soil same as above, and fertilized same way. Plants set April 4th. Quality fairly good; growth good, and average yield with other varieties. Insect enemies, *Macrosila Carolina*. (Linn.)

REPORT OF Mr. M. A. BISHOP,

MADISON, MADISON CO.

Cotton; Egyptian Bamaia.—Soil, dark brown stiff land; red clay sub-soil.

Manured with 200 lbs. acid phosphate,
 800 “ stable manure, composted.

Per acre, - 1000 “

Planted April 17. First open August 25th, last, November 1st. Gathered in November. Quality of product—staple about $\frac{3}{4}$ inch, very fine and silky and of medium strength. Growth rather slow, but stood the drought well. Height from 3 to 5 feet.

Mr. B. will plant again, and although hard to gin, owing

to the length and strength of staple, thinks it will do well when it becomes acclimated.

No enemies except the beetle, which disappeared after the nights got cooler.

Yield per acre about 500 pounds.

Cotton; Affiti-Egyptian.—Soil, and fertilized about same as above. Planted April 17th. First open September 1st, last November 10th. Gathered in November. Quality of product—lint cream colored, medium length and very fine and silky. Appears to be hardy as to cold; was not injured by spring frosts when other varieties were damaged. Grows from 6 to 10 feet high. Yield about 300 pounds per acre. Small insect, resembling a beetle, did damage to the squares by puncturing them just before the bloom appeared. Mr. B. thinks that this insect was imported with the seed, as it was not found in any other variety.

Unknown Pea.—Soil dark loam, high upland, manured with 200 lbs. acid phosphate and cotton-seed meal per acre, in drill between the corn at second plowing. Cultivated twice with walking cultivator. Planted in corn-field May 21st. First ripe September 22nd. Gathered October 10th. Yield, about 12 bushels per acre. Quality, perfect. A large, late stocky growth, producing peas in bunches around the base of vine. Should be planted earlier, as this crop was caught by frost November 2nd and many killed.

Mr. Bishop says that this pea will take the place of clover to improve worn-out soils, and regards it as a very fine pea. Dealers sold it at \$12.00 per bushel in his town last spring. No diseases.

Red Kaffir Corn.—Soil, chocolate loam, red clay sub-soil. Good natural corn land, no manure. Culture, same as corn or sorghum crop. Planted April 16. First ripe August 5th. Began to gather August 10th, last ripe October 10th. Quality of product, perfect. Yield, about equal to common corn. The injury by English sparrows was such as to lessen the yield. It made three crops.

Spanish Pea Nuts.—Soil, almost exhausted of vegetable matter, manured with 125 lbs. acid phosphate per acre, in drill at time of planting. Planted May 5. First ripe August 15. Gathered September 8th. One quart in the hull made two bushels. Quality perfect. An exceedingly early variety, would mature on ground following a wheat or oat crop. Farmers in Mr. Bishop's vicinity are beginning to raise them for fattening hogs, and Mr. B. says it is one of the best things that they have tried. No insect diseases.

Awnless Brome Grass.—Soil, loam and clay. Land plowed just before planting. Planted March 22. Imperfect stand owing to dry, cold spring. Stood drought and heat well, revived with first fall rains and bids fair to afford a good yield of hay next spring. It is regarded as a success, and many farmers are anxious to procure seed.

Sweet Clover.—Thin upland, gravelly loam, manured lightly, broad-cast. Planted broad-cast, March 22nd. Stand perfect, stood the drought better than Japan Clover. Made a growth of ten inches by July 1st, at which time stock was turned on. At this time, Nov. 24th, it is green and bids fair to stand the winter. Stock exceedingly fond of it.

Alfalfa or Lucern.—Dark loam moist soil, good land for corn and clover, no manure. Sowed broadcast. Planted March 22nd. Came up well and grew well until June 14th, when it died out. Will plant again in the spring and cultivate in the drill, and if it can be made to stand one season will be a success.

Crimson Clover.—Dry ridge land, dark loam, red clay sub-soil, and highly manured by turning under green vegetable matter and pasturing. Land thoroughly prepared by plowing and harrowing before seeding.

Planted March 22nd. Owing to extremely dry spring, the growth was stunned and did not grow large enough to mow. Crimson Clover is being extensively grown in this country in the last two years. Seed sown in August makes fine grazing in November. It is fast taking the place

of Red Clover, as the yield is equal and comes off in time to plant corn and get two crops.

Rape—Dwarf Essex.—Dark loam soil, 10 inches deep, very rich in plant-food. No manure applied. Ground thoroughly prepared as for turnips, and seed sown broadcast. Planted April 14th. Ready for use in six weeks. Yield per acre at least $3\frac{1}{2}$ tons. Quality of product good and good for hogs and cattle. The growth was enormous. By repeated sowings it will, and did carry more hogs through our dry, hot summers than four times the amount of land planted in any thing else ever grown here. Forty-nine head of hogs lived on it six weeks and did well. I would recommend it to all southern farmers.

Spurry.—Dark loam, very rich soil. Planted April 14th. Prepared land as for turnips, sowed broadcast, but supposed on account of the dry season the seed did not germinate. Consider it a failure.

Jerusalem Corn.—Light, gray sandy soil, rather thin, had rested two years previous, no manure. Bedded ground in February. Planted one foot apart in drill, May 5th. Not properly cultivated. First ripe August 10th. Gathered August 27th. Yield about 20 bushels per acre. Quality of product light and chaffy; had to gather too early on account of devastation by English sparrows. Did not tiller out like Kaffir Corn or Yellow Millo Maize.

Yellow Millo Maize.—Dark gray soil, mixed with sand, clay sub-soil, no manure. Land prepared as for common field corn. Planted May 14th. First ripe September 1st, harvested September 10th. Yield about 33 bushels per acre. Quality of product perfect. Much the best non-saccharine sorghum for this country ever tried. One peculiarity was, while the English sparrow destroyed all other grains, this was left untouched. With good seasons, can make as high as 50 or 60 bushels per acre, and the fodder is relished by all stock. A successful crop.

REPORT OF Mr. J. M. BRANNON,

SEALE, RUSSELL COUNTY.

Millo Maize.—Fresh soil, home mixture fertilizer used. Planted April 10th, harvested July 25th. Yield was satisfactory, and quality of product good. Thinks it unnecessary to put aside sorghum as a stock feed.

Red Kaffir Corn.—Stiff, sandy hill-side. Quality good. Yield good. Fed to stock while green. Gave a larger yield of forage than sorghum.

Spanish Pea-nut.—Poor sandy soil unfit for anything else, no manure. Planted April 20th, harvested October 2d. Quality good. Is common in this section and fruits better than any other kind.

Jerusalem Corn.—Sandy loam, clay sub-soil. Stable manure, phosphate and cotton-seed meal composted. Planted May 25th. Plant grew well and large enough and headed out properly, but contained no seed. Considers it a poor crop in that locality.

REPORT OF Mr. T. W. BRADLEY,

WALKER SPRINGS, CLARKE COUNTY.

Alfalfa—Planted June 20. Light sandy soil. Acid phos. and cotton seed meal 100 lbs per acre. Died out on account of the hot summer sun. Replanted Oct. 10th, and at the time this report was made, the prospect flattering for a crop.

Rape.—Planted June 20th. Black sandy soil—stable manure. Quality of product good. Fed cows, sheep, goats and hogs on it and expected to save a good quantity of seed.

Red Kaffir Corn.—Planted May 10. Hill side; 100 lbs. cotton seed meal and 50 lbs. acid phos. per acre, harvested Sept. 1st. Product only fair. Came up and grew off well, but the drought came on it about the time of heading and cut off the crop.

Yellow Millo Maize.—Black bottom soil, no manure. Planted June 15, harvested Oct. 12. Quality of product very fine. No diseases.

Unknown Cow Pea.—Level gravelly land, stable manure broadcast. Planted April 15, harvested Aug. 25th. Product very fine. 1 quart was planted and the yield 3 bushels.

Jerusalem Corn.—Hill side, black soil, 100 lbs. cotton seed meal and 50 lbs. acid phos. per acre. Planted May 10, harvested Aug. 20. Product good; yield per acre 20 bushels.

Spanish Peanut.—Level sandy land, lot manure broadcast. Planted June 1st, harvested Oct. 27th. Product very fine.

REPORT OF Mr. D. L. BROWN,

RANDOLPH, BIBB COUNTY.

Unknown Pea.—High, dry sandy soil, no manure. Cultivated with heel-scrape, two plowings. Planted June 3rd, first ripe Sept. 15th, harvested Oct. 15; quality very fine; rapid growth.

Mr. B. says "it is a very fine pea and I can not say too much in its favor."

Clover—Red and White.—All killed by extreme drought.

Egyptian Cotton.—Sandy soil, oak and hickory flat, manured with compost of phosphate and barnyard manure about 250 lbs. per acre. Cultivation thorough, with scrape and hoe. Planted April 14th; first open boll August 15th, and continued opening until frost. Yield per acre very poor; quality inferior; lint short and yellow.

Mr. Brown considers this cotton a "flat failure" for this country.

REPORT OF Mr. G. W. COMPTON,

WAYNE, MARENGO COUNTY.

Alfalfa.—Soil sand, clay sub-soil, no manure, fresh land. Land broken, seed sowed broad-cast and brushed in. Planted April 20th, grew to a height of 4 to 6 inches about August 1st,

and then died. Melilotus had been tried on the same soil, but would never prove successful.

Spurry.—Soil same as for Alfalfa, no manure. Planted April 22nd, like the Alfalfa, grew to a height of 4 to 5 inches and died out about July 1st.

Red Kaffir Corn.—Soil same as above, no manure. Land prepared like that for cotton crop and cultivated same as cotton. Planted April 28th, harvested Oct. 1st. Quality of product poor. Growth not very good and the yield was poor, grains being very scattering in the heads.

White Millo Maize.—Soil same as above, no manure. Culture same as cotton. Planted April 28th, harvested Oct. 1st. Quality of product good; growth good; yield good. Gathered a wagon body, that holds 15 bushels corn, full from 4 rows 70 yards long.

Awnless Brome Grass.—Seed did not germinate.

REPORT OF Mr. W. D. CRENSHAW,

HACKNEYVILLE, TALLAPOOSA COUNTY.

Jerusalem Corn.—Soil, red clay; hillside, manured with compost in drill. Cultivated as other corn. Planted April 10th. Did not mature; results perhaps would have been better on good land.

Spanish Peanuts.—Soil, clay, no manure. Cultivated same as cotton. Planted May 1st, first ripe Aug. 10th; harvested Oct. 1st, large yield. Quality good. Vines grew upright, very prolific and excellent for hogs.

Red Kaffir Corn.—Soil red, thin hillside, manured in drill with compost. Cultivation not good. Planted April 1st, first ripe Aug. 15; harvested Sept. 10th. Yield about 5 bushels per acre. Quality of product not good—not equal to sorghum for any purpose.

Alfalfa. Sowed broad-cast and choked out with weeds and grass. No report.

Unknown Pea.—Dark sandy soil, no manure. Cultivated every ten days. Planted May 5th, first fruit ripe Sept. 1st; harvested Sept. 20. Yield per acre about 15 bushels.

Quality of product good. Foliage dense, grows upright and better than the ordinary pea. An excellent pea for hogs.

Egyptian Cotton.—Soil, black upland loam, manured broadcast with lot manure and some guano in drill. Planted April 12th, first open Oct. 1st. Gathered during October and until frost. Yield about 600 lbs. per acre. Lint very long and strong.

Another variety of Egyptian cotton, Mr. Crenshaw says, is worthless on account of the smallness of bolls and being so few on the stalk.

REPORT OF Prof. C. C. L. DILL,

DILLBURG, PICKENS COUNTY.

Jerusalem Corn.—Land sandy, manured 10 bushels cotton seed per acre. Planted June 1st, harvested Sept. 15th. Yield about 15 bushels seed per acre. Quality of product fair, not equal to sorghum as a forage.

White Millo Maize.—Land sandy, manured with cotton seed. Planted June 1st, harvested Sept. 15th. Yield about 15 bushels seed per acre. Quality of product fair.

Egyptian Cotton.—Sandy loam, manured with compost from cow pen. Planted June 8th, harvested October and November, first open October 1st. Yield per acre about 200 lbs. Quality of product, fine strong fibre, dingy color. Stalk large, bolls small, does not pay for cultivating.

Awnless Brome Grass.—Planted June 5th. Seed did not germinate on account of drought.

REPORT OF Mr. D. B. EDWARDS,

POLK, DALLAS COUNTY.

Spanish Ground Pea.—Soil red and sandy, no manure. Cultivated same as for cotton. Planted March 1st, first ripe July 15th, gathered July 25th. Quality generally good. Yield good and well matured. Unless dug as soon as matured, will sprout in the field if the seasons be wet.

Kaffir Corn.—Sandy soil, no manure. Cultivated as other

corn. Planted March 15th, first ripe July 1st, last ripe July 15th. Yield fair, product ordinary, injured by the early six weeks drought.

Lucern (Alfalfa).—Soil same as above, manured with cow pen fertilizer. Planted March 1st, in drills. Has not made much headway, but hope to have a fine patch next year as it is very tenacious of life and requires time.

Jerusalem Corn.—Soil as above. Planted 1st of March. Ruined by early long drought.

Unknown Cow Pea.—Soil, gray bottom and sandy, no manure. Planted May 15, on beds between corn rows. First ripe September 1st. Began to gather as they ripened. Yield very large, large pods and 20 peas to the pod. Quality very fine; growth very luxuriant, and surpasses all other varieties ever before tested. Vines continued green up to frost.

Mr. Edwards says he is thankful that he got it and will continue its culture.

Cotton—Foreign Fijii.—Soil, sandy loam, manured with 200 lbs acid phos. and cotton seed meal per acre. Planted April 28th, first open August 15th. Yield about 700 lbs. per acre. Generally 3 locks to the boll. It rained 23 days during July, causing it to shed many blooms. Insect enemies, boll worm. No rust, though other varieties suffered from the rust. The lint is very fine, has a stained color resembling wool and Mr. E. says when it is dyed it is a difficult matter to tell it from wool. This may prove a very valuable variety as a wool substitute or rather for mixing with wool.

REPORT OF Mr. R. T. EWING,

CENTRE, CHEROKEE COUNTY.

Rape—Brassica Riapus.—Good loam soil. Complete failure.

Sweet Clover.—Good loam soil. All died during the drought.

Alfalfa or Lucerne.—Good loam soil. Seed did not come up.

Crimson Clover.—Black loam soil. All died within a month after coming up.

Awnless Brome Grass.—Soil sandy. Seed did not germinate.

Yellow Millo Maize.—Good sandy soil, no manure. Cultivated same as field corn. Planted May 10th, first ripe Aug. 15th, gathered Sept. 15th. Yield very good, quality good, growth vigorous.

White Millo Maize.—Good sandy soil, no manure. Planted in rows April 10th. Quality good, yield good considering the poor stand. A heavy rain just after planting packed the land and prevented its coming up better.

Red Kaffir Corn.—Soil sandy and low, no manure. Planted April 10th. Sowed broad-cast. Failure.

Jerusalem Corn.—Good sandy soil with red clay sub-soil, no manure. Planted May 5th, poor stand. What was made was of good quality and the growth was good.

Spurry.—Light sandy soil, no manure. Prepared the land, which was fertile, in good condition and sowed broad-cast. Planted May 15th. All died out from drought.

Spanish Peanuts.—Gray sandy soil. Planted May 5th, first ripe Aug. 1st, gathered Oct. 15th. Quality very fine. Growth and yield fine.

REPORT OF Prof. J. B. ESPY,

ABBEVILLE, HENRY COUNTY.

Japan Cotton.—Sandy soil, clay sub-soil, manured with 250 lbs. guano per acre. Cultivated with heel-scrape and shovel. Planted April 10th, first open boll Sept. 8th. Yield 344 lbs. per acre seed cotton, 112 lbs. lint. Quality of staple excellent. Grows about 4½ feet high, hardy and thrifty, long limbed, fruits poorly, bolls small and contain only three locks.

REPORT OF Mr. URIAH JOHNSON,

TRINITY, MORGAN COUNTY.

Jerusalem Corn.—Sandy soil. Planted June 15th, harvested Sept. 15th. No manure. Seed crop good, forage short and hard.

Yellow Milled Maize.—Sandy soil, no manure. Quality of product not good. Poor yield. Bottom blades fired before seeds commenced to mature. Stalk large and light. Not so good as sorghum. Small insects injured it very much.

Spurry.—Sandy land, no manure.

Egyptian Cotton.—Sandy land, red clay sub-soil, no manure.

Planted April 15th. Yield about 200 lbs. per acre. Lint very fine and weak. Stalks from 3 to 6 feet high, very few limbs and bolls.

Spanish Peanut.—Land same as above. Planted May 1st, harvested Oct. 1st. Quality good.

Rape.—Land same as above. Planted on land that had been used for cow pen, and it was rich. Planted June 15. Eaten up by a beetle unlike any insect he ever saw. Only eats the *Rape*.

Unknown Cow Pea.—Land same as above, no manure. Product good.

Melilotus.—Land same as above. Planted April 1st, no manure. Good product. Growth slow in Spring, but in August and September the roots grew large and deep into the ground.

REPORT OF Mr. J. A. LOGAN,

CLANTON, CHILTON COUNTY.

Turnip—*Purple Top, White Flat Dutch, Snow Ball and Golden Ball*.—Light soil, fertilized with guano and Ala. Fertilizer. Planted in rows in September. Yield about 100 bushels per acre. Quality of product as fine as can be grown.

Cotton—*Hawkin's Improved*.—Light soil, manured with compost. Cultivated as other cotton. Planted April 15th, first open Oct. 31st. Yield one-half bale per acre. Growth tall, very full of bolls, rather small, but a good cotton. Some rust.

Egyptian Cotton.—Soil mixture of red and gray pine land, manured with compost. Cultivated as other cotton. Planted April 25th, harvested September and October. Yield about

one-third bale to the acre. Lint short, bolls scattering, very large growth.

Spanish Peanut.—Ordinary fresh soil, manured with compost. Planted in April. Quality good. Yield 50 bushels per acre. Very fine variety.

Jerusalem Corn.—Failed to germinate.

Spurry.—Fresh land, manured with compost. Planted in March. Came up and grew about 10 inches high and died. Considered worthless.

Unknown Cow-pea.—Soil red; had been in cultivation several years, manured with phosphate. Culture same as cotton. Planted in May. First ripe in August. Yield good, and growth fast and vigorous.

Awnless Brome Grass.—Light gravelly land, manured with compost of lime and phosphate. Sown broadcast in March. Came up, but was choked out by crab grass.

Alfalfa.—Soil as above. Planted in March. Came up a fine stand, but after reaching 12 inches high, died out from dry weather.

Red Kaffir Corn.—Soil as above. Planted in May. Manured with stable manure and phosphate. Yield about 25 bush. per acre. Quality good, and grew well although the weather was extremely dry.

REPORT OF J. H. LOVEJOY.

ETOWAH COUNTY.

Alfalfa.—Sandy upland, no manure. Planted March 10. Badly killed by March freeze, and the few stalks remaining did not do well for want of culture.

Unknown Cow-pea.—Sandy upland, no manure. Planted July 10th; gathered October 1st. Products *very fine indeed*. Consider them the best pea I have ever grown, and shall discard all others for them.

Yellow Millo Maize.—Sandy upland, broadcast five wagon loads stable manure per acre. Planted May 9th; harvested September 10th. Quality of product seemingly as fine as it could be. Rapid growth; made a large quantity of foliage, and the seed a most excellent feed, especially for chickens.

Spanish Peanuts.—Sandy, no manure. Planted May 20; harvested August 30. Quality good; about 50 bu. per acre. A desirable variety, as the vines grow in a bunch straight up and the nuts grow close to the vine and adhere in gathering, which makes them easy to gather.

Kaffir Corn.—Sandy upland, five wagon loads stable manure per acre, broadcast. Planted May 10th; harvested September 10th. Crop would have been very fine, had it not been injured by English sparrows at the time the seed began to form.

Sweet Clover.—Sandy upland, no manure. Planted Mar. 10. Did fairly well; cut twice, fair crop each time. Horses very fond of it.

Crimson Clover.—Sandy upland, no manure. Planted March 31. Killed out by summer drought.

Spurry (Spergula Arensis.)—Sandy soil, dressing of stable manure. Planted March 31. Quick growth, but very low; not high enough to cut. Made a good crop of seed.

Awnless Brome Grass.—Sandy upland, no manure. Planted March 31. Got a good stand, but died out on account of the summer drought. "Not the grass for my soil."

Egyptian Cotton.—Complete failure.

Tobacco.—Sandy upland, manured with a small quantity in the drill. Plants set about May 1st; harvested September 10th, quality pronounced by judges to be excellent. Yield about 800 pounds per acre. Think tobacco a paying crop for this section, and am convinced that it is more profitable than cotton. Only wormed it two or three times.

REPORT OF Mr. S. PERCY JONES,

JOSEPHINE, BALDWIN CO.

Spanish Peanut.—Soil sandy, manured with cotton-seed meal, at rate of 500 pounds per acre. Plowed twice; hoed once. Planted April 1st; harvested August 1st. Yield per acre, 32 bush. Does well in this soil and climate.

Spurry.—Soil sandy; no manure. Planted April 15th; harvested June 5th. Grows about 15 inches high. Not so good as Giant Spurry.

Alfalfa.—Low land; manured with 500 pounds cotton seed meal per acre. Planted March 5th. Killed out by drought. No yield.

REPORT OF Mr. R. D. MARTIN,

FLORENCE, LAUDERDALE COUNTY.

Yellow Millo Maize.—Soil, gray red clay sub-soil, on south hill-side, no manure. Culture same as for corn and sorghum. Planted May 1st. Gathered August 1st. Yield not measured, but was large. Growth vigorous, about eight feet high. It is a valuable addition to the forage crop; can be cut several times, and comes out very rapidly. Seasons were the dryest ever known.

Kaffir Corn.—Soil as above, no manure. Culture, same as corn. Planted May 1st; harvested September 1st. First ripe August 1st. Owing to extreme drought, did not estimate the yield. Heads measured from eight to eighteen inches in length, and one solid mass of large grains. Stock fond of it. Have saved nearly all for seed.

Jerusalem Corn.—Soil on edge of basin, no manure. Planted May 1st; harvested September 15th. Not so tall a growth as Millo Maize; will grow it another year. Stock like it very much.

Unknown Cow Pea.—Light thin soil, well drained, no manure. Cultivated as directed on package. Planted May 29th. Gathered in September. Yield 15 to 20 bushels per acre. Quality very fine. Pods extra long, and on account of the extremely dry weather, many were lost from shattering out. Had the seasons been better, the crop would have been larger.

Crimson Clover.—Soil in a low place, no manure. Planted in March. The extremely dry spring caused it to die-out some, and on account of dry weather did not grow tall enough to cut.

Lucerne.—Soil as for clover, no manure. Planted in March. Owing to drought, grew about 12 inches high and seeded. Stood the drought remarkably well.

Brome Grass.—Soil as for Lucerne, no manure. Planted in March. Did not develop sufficiently to authorize a report. May do better the next experiment.

Egyptian Cotton.—"No good" for this climate, will not mature.

Spanish Pea-nut.—Soil, light sandy, no manure. Planted May 1st, harvested in October. Yield per acre, *large*; *quality good*.

Tobacco, Brazil variety.—Cured bulk of crop by pulling off the leaves as they would ripen and hanging them on sticks in a log house. Sold most of it at 30 cents per pound. Took premium at the county fair.

REPORT OF Mr. WM. MARTIN,

GREENSBORO, HALE COUNTY.

Egyptian Cotton.—Soil, level, sandy upland, no manure. Cultivated by first barring-off, and afterwards by plowing with sweep, and hoeing. Planted April 10th. First open August 1st. Last open October 1st. Gathered in September and October. Yield per acre, 1,200 lbs. Quality good. No insect enemies; no plant diseases.

REPORT OF Mr. J. W. MIZE,

REMLAP, BLOUNT COUNTY.

Spanish Pea-nut.—Light sandy soil, clay sub-soil, manured light with stable manure. Cultivated with hoe and small shovel. Quality of product very good, and the crop good.

Egyptian Cotton.—Flat branch land, manured with dry pulverized stable manure. Cultivated with small scooter-heel-scraper and hoes. Planted April 20th. Yield, about 400 lbs seed cotton per acre. The quality of lint was very fine and yellow. The growth tall, limbs long, bolls very small and scattering. Same ground in common cotton would make 1,600 lbs.

Jerusalem Corn.—Soil dark, red sandy, manured with small quantity of stable manure. Planted May 7th, harvested September 20th. Nothing good but the heads or tops, which grew compact and is relished by stock. Stalks low and pithy.

Red Kaffir Corn.—Gray, sandy soil, no manure. Planted April 26th, harvested September 17th. Nothing good but the heads. Quick growth.

Tobacco.—Branch, sandy loam, no manure. Planted in May; harvested in September. Hester variety after curing was strong and had a rich color and fine flavor. Comstock Spanish, cured yellow, with a fine flavor.

REPORT OF Mr. S. H. PRUITT,

SHADY GROVE, PIKE COUNTY.

Egyptian Cotton.—Soil sandy, manured with 150 pounds guano per acre. Planted last of May. Gathered first December. Yield about 300 lbs. to the acre. Growth rapid, stalks from 6 to 10 feet high.

Brome Grass.—Soil sandy, Cow-pen manure. Planted March 1st. Matured first seed June 11th. Yield good. Product very good. Rapid growth.

Spurry.—Land and manure as above. Planted March 1st. First ripe seed May 10th. Quality very fine and yield good.

Alfalfa.—Level sandy soil, Cow-pen manure broad-cast. Quality good. Growth fine and rapid, and is recommended in that section.

REPORT OF Mr. T. A. SNUGGS,

HOLLY POND, CULLMAN COUNTY.

Kaffir Corn.—Soil gray, manured with 100 lbs. guano per acre. Cultivated same as cotton. Planted May 15th; harvested October 1st. Yield about 30 bushels per acre. Quality a little better than sorghum. Mr. Snuggs considers

this a fine food for stock, but it should be threshed and the grains crushed as stock fail to masticate it.

Spurry.—Gray sandy soil, no manure. Planted March 20th. Dry spring season; grew to be about three inches high. Failure.

Jerusalem Corn.—Seed did not germinate.

Unknown Cow Pea.—Soil, gray sandy, manured with mixture of acid phosphate and cotton-seed meal. Planted June 15th, between corn rows. First ripe September 15th; harvested October 10th. Quality of product good and well adapted to this soil and climate.

Rape.—Soil gray, manured with stable manure. Cultivation same as rutabaga turnips. Planted July 20th. The drought was too prolonged to determine its merits.

Millo Maize.—Soil, gray hill-side, manured with 100 lbs. guano per acre. Cultivated in three feet rows, same as cotton. Planted May 1st; harvested October 15th. First ripe October 15th. Last ripe November 1st. Did not mature well. Not adapted to this soil and climate.

Spanish Ground-pea.—Soil, gray, south hill-side, manured with compost of cotton-seed and stable manure. Cultivated in 2½ feet rows. Planted May 15th; harvested October 1st. Quality good, and is a very fine ground-pea for this climate and soil.

Crimson Clover.—Soil sandy and trod. Planted April 1st. The spring drought was fatal to this crop.

Egyptian Cotton.—Soil gray, east hill-side, manured with 150 lbs. guano per acre. Cultivated like ordinary cotton. Planted April 26th. First open September 1st. Yield about 200 lbs per acre. Quality of product not good. Not adapted to this country, bolls too small and scattering and too slow in maturing.

Hawkins Improved Cotton.—Soil, sandy, south hill-side, manured with compost of stable manure and cotton-seed. Cultivated as other cotton. Planted April 26th. First open boll September 1st. Yield per acre about 700 pounds. Quality of product good. This cotton is very prolific, but the bolls are too small.

REPORT OF Mr. ROMEO TAGLEABUE,

DAPHNE, BALDWIN COUNTY.

Unknown Cow Pea.—Soil, high gray, red clay sub-soil, manured, kainit 280 lbs. bone dust 100 lbs. per acre. Not cultivated. Sown broad-cast. Planted May 18th. Harvested from last of June until the last of October. Yield very large. Product very good. Insect enemies, common pea beetle.

Crimson Clover.—Plateau on an elevation, gray soil, manured with 100 lbs. lime, 200 lbs. kainit, and 40 lbs. bone dust, per acre. Not cultivated. Failure.

Yellow Millo Maize.—Soil same as above, manured with 330 pounds kainit, and 130 pounds bone dust per acre. Culture, one hoeing and one plowing. Planted May 24th; harvested October 25th. First ripe 15th September. Yield about 40 bushels per acre. Quality good. Growth of grains and stalk enormous, some stalks 14 feet high and some heads weighed $2\frac{1}{4}$ pounds. This plant is highly recommended. Insect enemies, yellow winged beetle, same as attack cow-peas.

Brome Grass.—High, gray soil, manured with 200 lbs. kainit, 40 lbs. bone dust per acre. Planted May 28th. Did not germinate.

Spurry.—High elevation, gray soil, manured with 160 lbs. lime, 330 kainit, 100 lbs. bone dust per acre. Planted May 28th. A few seed sprouted, but soon all signs of the plant disappeared.

Spanish Peanut.—Soil same as above, manured with 600 lbs. kainit, 350 lbs. bone dust, 130 lbs. cotton seed meal per acre. Cultivated with two hoeings soon after the plants came up, and nothing more. Planted May 26th; harvested October 15th. Yield per acre about 70 bushels. Quality small, but good. Growth good, but suppose the results would have been as large with less manuring. The vines are good for horses and cattle.

Red Kaffir Corn.—Plateau upon a high elevation, sandy

gray soil, manured with 200 lbs. kainit, 140 lbs. bone dust' 60 lbs. cotton seed meal per acre. Cultivation, hoed one time, and then hilled. Planted May 21st; harvested August 25th. First ripe July 31st. Yield about 35 bush. per acre. Quality good. Growth and yield satisfactory, though there were some missing hills.

Mr. T. thinks the growth and yield could have been increased by better culture and by cutting the stalks earlier than this was cut.

Jerusalem Corn.—Soil same as above, manured with 330 lbs. kainit, 130 lbs. bone dust per acre. Culture same as the *Kaffir*. Planted May 23d; harvested August 25th. First ripe last of July. Yield about 30 bush. per acre. Quality good. A good many seeds did not come up. The growth and yield very satisfactory; at the same time better culture would have given better results. Well pleased with it.

Rape.—High elevation, gray soil, manured with 330 lbs. kainit, 160 lbs. bone dust, 100 lbs. cotton seed meal per acre. Cultivation, several hoeings. Planted May 26th. Quality of product good. Only a few seeds sprouted, and they made enormous bunches of leaves that were as good as cabbage. Will try it again with a heavier manuring. Insect enemies, the common cabbage worm.

Alfalfa.—Soil same as the foregoing, manuring—100 lbs. lime, 200 lbs. kainit, 40 lbs. bone dust per acre. Planted May 26th. Sprouted June 2d, and up to Nov. 26th, rootlets had grown about a foot long. Prospects good for its doing well after it becomes firmly rooted. Growth continues from year to year.

Sweet Clover.—Soil as above, manured with 100 lbs. lime, 200 lbs. kainit, 100 lbs. bone dust, 40 lbs. cotton seed meal per acre. Planted May 20th. Complete failure.

REPORT OF Hon. J. C. OTT,

FLORENCE, LAUDERDALE COUNTY.

Egyptian Cotton.—Soil level, on Cox's Creek, fertilized with acid phosphate, and cotton seed meal. Cultivated like

ordinary cotton. Planted April 17th, first open boll Sept. 21st; harvested Nov. 1st. Yield about 250 lbs per acre. Quality of product good. Growth vigorous, 3 to 5 feet high. Yield poor on account of maturing so late. Peerless cotton on the same land produced 1,100 lbs. per acre.

Egyptian Cotton (Afifi).—Soil same as above, manuring same as above. Cultivated same as ordinary cotton. Planted April 17th, first open Oct. 1st. Yield practically nothing. Growth extremely vigorous, from 6 to 10 feet high. All labor and fertilizer and use of land lost.

Spanish Peanut.—Soil level, on creek, manured with cotton seed meal. Cultivated about the same as cotton. Planted April 27th; harvested Sept. 18th. Yield per acre about 63 bushels. Quality very good. Growth vigorous.

Yellow Millo Maize.—Soil about the same as above, manured with cotton seed meal. Cultivation: Broke land in Nov. and again in April, just before planting. Planted May 1st; harvested at intervals. First ripe middle of August. Last ripe Oct. 1st. Quality of product, very best. Vigorous growth, abundant yield of green feed, the use of which I mostly made of it.

Mr. Ott says it is very valuable as a green feed and for fodder, producing two or three crops from the same planting.

Jerusalem Corn.—Soil similar to that on which the foregoing were planted, manured with cotton seed meal. Cultivation: Broke land in Nov. and again in April and plowed with double shovel. Planted May 1st, first ripe last of July, last ripe Aug. 20th; harvested Aug. 28th. Yield and quality not good, on account of excessive rains, causing the seeds to mould before maturing. Growth very vigorous.

Red Kaffir Corn.—Soil same as preceding experiments, manured with cotton seed meal. Land was broken in November and re-broke in April, cultivated with a double shovel. Planted May 1st, first ripe Sept. 1st, last Oct. 15th; harvested at intervals. Quality of product very good. Growth vigorous, yield heavy as a forage plant. Foliage heavy.

