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AGRARIAN

PHILOSOPHY

Ray Buck, Co-Editor

Spring has returned to us again as it does each year. It returns with beauty, with joy, and above all else, with hope for the future. The labor of spring has returned also. We could not wish to have all this goodness without labor. We work diligently and hopefully to bring forth greener fields, fuller harvests, and to add beauty to that which Nature brings to us. Plowing and planting, tending and tilling are signs of spring as sure as the song of the robin or a peach tree in bloom. In our work, we work with hope, we work for the future.

The history of our troubled civilization can be compared to the seasons. It is repeated again and again just as the seasons come, pass, and come again. The fall of man's sensibility has resulted in untold strife and countless wars—senseless, destructive, hopeless wars. The earth has blazed red with the flames of destruction. Men and hopes have fallen as leaves before the October wind. Wars end, but who is victor?

And then the earth lies gray and still and cold. Destruction passes, but there is no peace in desolation. The world is barren; it lies dormant, waiting.

From this destruction hope springs. Men begin to face the future, with lifted eyes. Men dare to dream. They dare to dream of joy and beauty and peace. Men again feel the joy of building and there is a reawakening, and a new life rises. Peace is a glorious thing.

Must this spring, this peace, this dream of the ages pass away as spring passes into summer and summer into fall and winter? We must not despair. We must carry this ageless dream forward and add dreams of our own. These dreams must be fortified with work and, above all, our earnest prayers that God will alter the seasons of future generations that men may live in the eternal spring of Peace.
Two familiar old faces always welcome you back to the campus.

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Recommended Crop Varieties in South Carolina

Bill DuBose, Ent. '57

Spring has again made its entrance into the South. The trees, awakening from their winter dormancy, are beginning to put forth buds for the seasons new growth. So are the farmers in South Carolina beginning to sow the seeds for a new harvest season in the fall. All winter, the farmers have been planning this year's crops, where each crop will be planted, how it will be cultivated, and the multitudes of other decisions which have to be made in advance. Possibly he has been planning to use a new variety of a certain crop, or perhaps he has been planning to use his same old stand-by for another harvest yield.

In this article it is the wish of the author, with the advent of spring, to present some of the latest in crop varieties and review a number of the stand-bys of the past years. The author is not in a position to recommend any of the crop varieties discussed; his purpose is not to advocate certain varieties, but to present them for the interest of the reader.

Cotton, South Carolina's number 1 cash crop, is represented by Coker 100 W.R., Stonewilt, and Empire in the 1955 crop recommendations program for South Carolina. The world record in production is held by Coker 100 W.R. which was established in 1951. These varieties should be planted in fertile well-drained soil as soon as danger of cold weather is past. The seed can be treated with 8 ounces of 2 percent Ceresan or 4½ ounces of New Improved Ceresan per 110 pounds and planted at a rate of 25-30 pounds per acre. Along with proper cultivation and fertilization practices, the proper recommended insecticides should be used and applied with thorough covering at the most advantageous times to provide for effective insect control.

The second most important field crop—in normal annual returns per year is tobacco. Flue-cured tobacco is now grown by about 34,000 farm families, mostly in the Coastal Plains section of the state. Plant beds protected by windbreaks to the north and west should be prepared from deep mellow loam soil with high organic matter content. These soils should be of average fertility and have good water holding capacity. Beds are prepared in January and February and the small plants are transplanted between April 15 and May 1. Seeding of the bed should be 1/3 ounce of seed per 100 sq. yd. Golden Harvest, 402, Virginia Gold, Golden Wilt, Oxford 1-181, Golden Cure, Hicks, and Dixie Bright 101, are some of the better producing varieties.

Corn, the most important feed crop in South Carolina, occupies about a fourth of the total acreage of cropland. With recommended hybrids and varieties, the farmer can with other proper practices use his land to produce more than the average 23 bushels per acre in South Carolina. Recommended varieties are: Coastal 811 and Dixie 18 in the Coastal areas, Dixie 17, N. C. 27, Douthit's Prolific, and Latham's Double. In the Testing program carried on at the branch experiment stations, Coker 811, a white grain hybrid, ranks first in production and lower in average per cent of lodging. This variety will produce 53 bushels per acre with 19 percent lodging over a 3 year average. This can be compared with the results of the 3 year average for Dixie 18, a yellow grain, which produced 53 bushels per acre and 30 per cent lodging occurred. In the Piedmont section of the state, Coker's 911 is recommended for the white grain variety while N. C. 27 is a good yellow grain. Coker 911 produced 63 bushels per acre with a loss of 19 per cent due to lodging, and N. C. 27 produced 59 bushels per acre with 16 per cent lodging. These figures represent a testing average of four years.

Corn seed should be planted in fertile, loamy, good to fair drainage soil. Seed may be treated prior to the planting time (March 1-April 15) by applying Arasan SF and DDT in slurry.

Soybeans is rapidly becoming a good cash crop for the Coastal Plains farmers who use the beans for oil.

(continued on page 12)
In-Service Training for Agricultural Teachers

Clyde E. Woodall. V.A.E. '57

When a prospective agriculture teacher graduates from Clemson there are many problems that he will soon face. For instance, does he know the best teaching techniques? Is he skilled in handling a class of boys? Does he know how to work with adult farmers? These are just a few of the many questions that he must answer. He must learn to apply the principles which he was taught at Clemson. Since agriculture is a changing field, the teacher must quickly adapt himself to new and better methods. He must be capable of advising young farmers as to the better ways of farming for each particular situation. He faces many problems which he did not study in college. He needs new materials on all recent developments in agriculture and he sometimes requires aid in analyzing them in order that he may be capable of presenting these materials to his students in a way they can understand.

This is where the In-Service Training program for agriculture teachers plays its role in the development of better teachers. This program is for both the beginning teacher and those already on the job. The activities are provided for and carried out cooperatively by the Agricultural Education Department, Clemson College, and the Agricultural Education Division, State Department of Education. The three phases of the in-service program are: (1) Follow-up of beginning teachers; (2) Preparation and distribution of teaching materials; and (3) Assistance to teachers through group meetings and workshops.

The follow-up of beginning teachers is being carried out by W. C. Bowen, Associate Professor of Vocational Education here at Clemson. Mr. Bowen visits all first-year teachers three times during their first year of teaching and may visit them in their second year. Other teachers who have some special problem are also assisted. The first visit to the new teacher is made early in the fall for one day. During this visit the teacher is assisted in: (1) Planning his teaching program for the year;

(2) Obtaining teaching materials;
(3) Using proper methods of instruction;
(4) Planning adult and young farmer programs; and
(5) Planning for community service.

The second visit is in the winter and lasts for two days during which time the teacher is observed on such points as presentation of material, class management, and results obtained. Also, the teacher is observed as to voice, tact and poise, interest, appearance, alertness, and cooperation. If additional materials are needed, Mr. Bowen helps to obtain them. He helps the teacher to analyze the needs of the local community and also to base his teaching program upon these needs.

The third visit is in the spring and lasts for one day. The visit is to observe what progress has been made with the instructional groups, observe improvements made in teaching facilities, and study the plans for the summer program.

The preparation and distribution of teaching materials for agricultural teachers is being carried out by Mr. F. E. Kirkley, Associate Professor of Vocational Education, Clemson College. Experimental findings in agriculture from the South Carolina Experiment station and those of nearby states, agricultural publications, and materials from the U.S. Department of Agriculture are used. These various publications are studied and analyzed for the most usable data by the teachers. This information is then arranged in "teaching form" or lessons. Teaching materials are prepared and distributed as printed bulletins and mimeographs. The mimeographs, entitled "Teaching Information for Agriculture Teachers," are published every four to six weeks. They contain not only recent experimental data, but also information relative to methods and procedures in teaching.

The printed bulletins usually carry more detailed information on one enterprise. Two bulletins prepared and distributed last year were: "Small Grains, as Enterprises in Supervised Farming Programs for Students of Vocational Agriculture," and "The Production and Preservation of Foods by Farm Families Through Instruction in Vocational Agriculture." The content of the printed bulletins is usually discussed when distributed to teachers.

The third phase, "Group Meetings and Workshops," varies from year to year. Everyone knows the old proverb, "Seeing is Believing," and this can also be applied to agriculture teachers. If they can see and take part in the operation of some teaching job, they learn much better and faster. In recent years, workshops in farm forestry and soil conservation were held with all teachers. Last year Mr. Kirkley and Mr. Bowen held meetings throughout the state on producing foods and preserving them in community canneries. The use of concrete on the farm, simple electrical jobs, and the establishment of running water on the farm, are some of the other jobs which have been discussed and demonstrated with small groups of agriculture teachers on a workshop basis. Various state agencies and commercial concerns have cooperated in making this training effective.

Farming is rapidly changing in South Carolina. Much research is being carried on in agriculture. New farm problems arise each year. The farmer can quickly become out-of-date in his farming methods. Likewise, the agriculture teacher must keep up-to-date. He cannot possibly acquire all the information and training in his four years at Clemson that he will need out on the job. The in-service program is apparently helping to meet this need. This type of work is being favorably received by the teachers.

There is a need for further extending assistance to agriculture teachers. The teaching problems of many teachers are peculiar to that locality. Our Agricultural Research Program in South Carolina, with the five sub-stations distributed over the state, offers a method of improving and assisting our agriculture teachers, as well as other agricultural workers, to be of greater help to the farm people.
insects
YOU SHOULD KNOW
How To Identify
These Crop Destroyers

BOLLWORM
_Heliothis armigera (Hbn.)_
A major cotton pest, the newly hatched bollworm feeds on leaves and then attacks squares and bolls. Greatest loss is caused by tunneling into and destroying bolls. Color varies from pink, green, to almost black. The full-grown worm is about 1½ inches long. The female lays about 1,000 eggs, particularly on growing tips, squares and bolls.

POTATO LEAFHOPPER
_Empoasca fabae (Harr.)_
This leafhopper is one of the alfalfa producer's greatest enemies because all stages of the pest suck juices from alfalfa plants, stunting growth and reducing yield. They are also the cause of "hopper burn" on potatoes. A tiny, pale-greenish insect, this leafhopper is not found in Northern states during winter, probably flying in from the South, where they breed during the entire year.

ARMYWORMS
_Pseudaletia unipuncta (Haw.) and Laphygma frugiperda (A. & S.)_
Armyworms are a major pest of cereal and forage crops, their damage sometimes totaling millions of dollars. Armyworm invasions commonly follow cold, wet springs. The tiny, newly hatched caterpillars feed near the ground. Fully grown, they have enormous appetites, the noise of their feeding making a rustling sound in the fields.

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Jack C. Langston, Ent. '56

America’s population is increasing by more than 7,000 persons a day. A year from now there will be two and one-half million more people; in twenty years, more than thirty million. Where will the additional food come from to feed and clothe the growing population? Most of the land that is suitable for farming is already being used for that purpose. In the main, increased production must come, not from new land, but from improved farming practices.

Insect control is one of the best ways to increase production—and if production must be increased, surely it is important to protect our food and fiber from insect damage after they are produced. Hundreds of entomologists are at work on research projects aimed at reducing insect damage and providing farmers with the “entomological know-how.”

The profession of entomology began in the U. S. in 1854. Recognition of the need for insect control led to the appointment of two entomologists to government positions. One worked for the Federal Government and the other for the State of New York. Soon, others entered this new field of science. These men blazed scientific trails, and left guideposts for other entomologists to follow in studying methods of controlling insects and minimizing their destructiveness.

Today, fewer than one-thousand persons work full-time in research on insect problems. During the past century, the profession on entomology has had less than 6,500 members. Yet the efforts of these dedicated men and women have helped this country to become one of the strongest, and its people to be among the healthiest and best fed on earth.

Some entomologists specialize in taxonomy, physiology, or biology, and some in bee culture. Those in schools train future entomologists and pass on new ideas and information to the public. But most entomologists are in the insect-control phase of the profession. As research workers, plant-quarantine inspectors, supervisors of control programs, or Extension Service specialists, they are directly concerned with combating the approximately 10,000 kinds of insects that destroy our food, injure our health, or damage our homes and our possessions.

Few people have any idea what would happen if man’s ceaseless war on insects was relaxed for even a month—millions of bushels of wheat ruined, an entire potato crop reduced by one-half or two-thirds, or every fifth person in a major city mortally ill with plague or yellow fever—such possibilities never occur to the average American.

Unlike most other troubles of man, bugs affect each and everyone of us. They work on our agricultural crops, both food and fiber; they invade our homes to feed on our woolens and our food; they despoil our forests and our outdoor recreation areas, and they transmit some of the most dreaded sicknesses of mankind. Entomologists estimate they cost us at least four billion dollars a year.

Without insect control, these pests would destroy more than half the annual agricultural per-acre production of the farm and ranches of the United States. A majority of the most destructive insects of North America are aliens. Beginning with the discovery of this continent and continuing until the passage of the Plant Quarantine Act of 1912, foreign pest hitch-hiked on passenger and cargo ships to this country. They are still trying to get in—and occasionally succeeding—but our quarantine inspectors generally prove to be an effective barrier.

Insects have played a vital part in the history of the United States. Some entomologists maintain that mosquito-borne malaria in the Southeast debilitated slaves so that they could not work the rice plantations of Georgia and the Carolinas, and thus impaired the economy of that section of the South — that it was malaria, and not the Civil War, that impoverished the rich rice plantations of the Southeast. Malaria (continued on page 18)
52 YEARS OF SERVICE
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MARCH 1955
In general, South Carolina farmers can expect to receive about the same prices for their farm products as those prevailing in the latter part of 1954. Marketing margins for food products will average near current levels or slightly higher than in 1954. The farmers share of the consumer’s dollar spent for farm products will average about 43 cents, less than in any year since 1941, but 4 cents more than the 1935-1939 average. Available facilities, labor and other resources generally have been adequate to handle the large volume of farm products marketed in 1954 and no serious shortages are in prospect.

In the past several years new methods of marketing farm products have reduced some marketing costs. Examples of such are the collection of milk in tank trucks, bulk handling of such commodities as flour and sugar, and the use of lighter and cheaper containers in which to market fruits and vegetables. In many lines the scale of operations has been increased leading to economy in the use of labor, equipment and other resources. Selling milk and other products through vending machines is becoming more common, as are discounts granted for quantity purchases of milk. Freezing of fruits and vegetables has been a big step in reducing losses occurring in shipments of perishable products.

The general level of economic activity is one of the most important factors influencing the marketing of farm products. Generally this outlook is encouraging. Retail sales were up in January and were expected to remain about the same throughout the year. Food sales were up 2 percent. Incomes are now at a new high and consumers are using more credit now than at this time last year. Exports of farm products were up 10 percent from last year and from all indications will remain at about that level.

Prices consumers pay for food is expected to remain at the present level. Major changes in prospect are some marketing increases over 1954 for poultry and egg products and for canned fruits and vegetables. Prices of pork will most probably be lower than last year. Consumers are expected to eat about the same amount of food as in 1954 and will most probably spend about the same proportion of their incomes for it. The consumer’s food dollar is likely to be split about the same way this year as in 1954 with 43 cents going to the farmer and 57 cents to the marketing agencies.

Beef cows 2 years of age and older and heifers 1 to 2 years old are likely to increase on farms slightly during 1955. Number of bulls will probably decline and the number of calves will increase by about 2 percent. The 55 million hogs and pigs on farms January 1 was 13 percent above the relatively low figure of a year earlier. There may be a slight increase during 1955.

The outlook for dairy products is equally encouraging. The consumption of fluid milk has increased recently and is expected to remain at about the present level during 1955. The increase is due partly to the school lunch program, higher consumer incomes, and slight price declines in some cities. Use of fluid milk per person in 1955 will be up from 1954, although other dairy products are not expected to change. There were slightly fewer milk cows on farms January 1 than a year earlier. They are expected to produce about the same amount of milk as in 1954, barring drought, short pasture season, etc. Since the total use of milk will be up, the surplus will probably be lower than in either 1953 or 1954.

The higher broiler prices of the past few weeks are partly responsible for the expected increase in broiler marketings this spring. There will probably be about 18 percent fewer chickens raised for laying flock replacements than were raised last year.

The 1955 wheat crop is expected to be about 250 million bushels as compared to last year’s 217.

Exports of cotton are up and are expected to remain above last year’s figure. Exports totaled 1,626,000 bales from August 1 to December. This was a 397,000 bale increase over the same period of the 1953-54 season.

Production of fresh vegetables was down in March about 7 percent from last year. This was partly due to the mid-February freezes in Texas and Florida. Stored supplies of canned and frozen vegetables are below last year’s level. The prices of both potatoes and sweetpotatoes are well above a year earlier and are expected to remain up for a few months.

An understanding of the marketing outlook is partially dependent upon an understanding of marketing margins, which is one of the most complex problems confronting workers in the agricultural industry. Why should a shirt made from 35 cents worth of cotton cost $3.95? Why 95 cents steak from 30 cents cattle? To understand these “large” margins, one must understand the whole process of marketing. As the 1954 Yearbook of Agriculture states, “The basis of marketing is this: Farm goods must be stored, transported, processed, and delivered in the form, at the time, and to the places that consumers desire. Those functions are performed more and more by specialists and less and less by farmers. Their competition for your dollar encourages efficiency and conflict. The price of goods processed or made from American farm products in recent years has run about two and one-half or three times the farmer’s cash receipts. Is something wrong, then, with our marketing system? An answer to that question and to others like it rests on an understanding of marketing which can be said to begin at the farm gate. A brief first look discloses the many things that happen afterward. Assembling the raw commodities, transportation, preparation for use, storage, shifting and sharing risks, change in ownership, pricing, and exchange, wholesaling and retailing.” These are the major factors responsible for marketing (continued on page 20)
Greatest guardian of our soils is grass. Greatest single principle of soil conservation is grassland farming. And in that the great problem is how to make the grass productive and profitable—a worthy challenge to young ideas.

Green feeding is a new name for the old-world practice called soiling. It now becomes practical here because fast-working machines take the place of drudging labor. To choose between green feeding and grazing takes keen judgment on many points, from pasture fencing to possibility of bloating. In any plan for green feeding, the thing most essential is dependability of the machines that do the daily cutting. Cattle can't wait for their meals.

As you consider the merits of various meadow mixtures . . . of unloading to feed rack or allowing animals to eat from wagons . . . of greater or less amounts of grain and hay along with grass . . . take heed, too, of the machines you choose. For more than a hundred years it has been a Case habit to make every part a bit better than might seem necessary. It's an old habit that can help young ideas make the most of grass . . . whether you graze or green-feed, put up hay or silage. J. I. Case Co., Racine, Wis.

"Chop the Crop" . . . the story of how to harvest, handle and store chopped crops . . . is available as a full-color, sound motion picture and a booklet. Arrange with your local Case dealer for these educational aids . . . ask him also for a catalog on Case Forage Harvesters, described by users as America's Lightest-Running Forage Choppers . . . and available with today's widest choice of attachments. J. I. Case Co., Racine, Wis.
ALPHA ZETA TAKES IN NEW MEMBERS

On March 14, seventeen new members and two associate members were formally initiated into the South Carolina Chapter of the Fraternity of Alpha Zeta, national honorary agricultural fraternity. Alpha Zeta members are selected on the basis of their scholarship, leadership, and character. The associate members were selected on the basis of their leadership and service to students and farmers in the fields of agriculture and agricultural education.

The new members are the following named men: Carol E. Brown, an animal husbandry sophomore from Kingstree; Rawl D. Culclusure, Jr., a dairy senior from St. Matthews; Daniel D. Lee, an agricultural engineering sophomore from Dillon; James T. Ligon, an agricultural engineering sophomore from Easley; Reuel McLeod, an animal husbandry senior from Timmonsville; Alfred H. Pitts, an animal husbandry junior from Fort Motte; Jimmy A. Richardson, an agricultural engineering sophomore from Lancaster; William C. Thomas, an agricultural engineering sophomore from Edgemoor; Sanford N. Smith, an agricultural engineering senior from Spartanburg; James C. Stephenson, a pre-forestry sophomore from Clemson; Gene R. Ware, an agronomy senior from Due West; and Elbridge J. Wright, an agronomy junior from Belton.

The new associate members are professors L. M. Bauknight, associate professor in agricultural economics department; and Dr. M. D. Farrar, dean of the school of agriculture.

DAIRY CLUB NEWS

Among the many interesting programs that the Dairy Club has had this year is the program of January 11, 1955 in which Mr. B. D. Cloaning, Head of the Fertilizer Department, gave a talk about Clemson and some of its activities. Mr. Cloaning brought out some very interesting information about Clemson College and the Experiment Station work. Another interesting program was a moving picture entitled "The Rumen Story" which was shown at the meeting on February 8. This picture showed the complexity of the digestion in ruminant animals by actual observation through a window that had been inserted in a cow's rumen.

For a project this year the Dairy Club sponsored Preston the Magician and Hypnotist on February 24 and 25. Each member took an active part in advertising, selling tickets, and preparing the auditorium for the show. This show was a success and the Dairy Club would like to thank everyone who made it possible.

The Dairy Club extends to anyone majoring in Dairying an invitation to join the club at any time. Meetings are held on the second and fourth Tuesdays of each month in the Dairy Building at 6:15 P.M.

BLOCK AND BRIDLE CLUB NEWS

We are looking forward to our most successful semester of club work in many years. There are opportunities for everyone. Freshmen have the Freshman Judging Contest coming up in the very near future. The top two men will be awarded prizes by the club. These prizes are something the winners will value highly for many years to come.

Everyone seemed to enjoy the delicious barbecue at the Bull Sale. This barbecue was prepared and served by members of the Block and Bridle Club. Another enjoyable barbecue was put on by the club was the Intra-Squad Game barbecue which was served in the Clemson Field House on March 12.

Professor Handlin has taken steps to revive the Clemson Judging Team that once was active in the Southeastern Intercollegiate Judging Contest. Clemson was a charter member of this contest, and many club members are out for this team. All sophomores, juniors and seniors majoring in animal husbandry are eligible. This year the contest will be held on April 22 at Auburn.

FOURTEEN AGRICULTURAL SCHOLARSHIPS

A total of 14 agricultural scholarships will be offered at Clemson during the 1955-56 school year, according to Dr. J. W. Jones, Director of Agricultural Teaching here.

Dr. Jones said that the scholarships includes 10 freshmen awards valued at $200 each given by Sears, Roebuck Co., and one sophomore award of $250 by the same company to the most outstanding freshman Sears-Roebuck scholars of the preceding year. These awards are given on a state-wide basis to South Carolina boys with farm experience.

Of particular interest to prospective college students from Oconee County is the George E. and Leila Giles Singleton Scholarship, provided by G. H. Singleton, in honor of his parents. This scholarship, which may be held for two years by the same person provided his record as a freshman is satisfactory, is for $300 for a farm boy from Oconee County.

The donor of the Singleton award was graduated from Clemson in 1919 in agricultural education and has been manager of the Wake Farmers Cooperative in Raleigh, N. C., since 1930. He was born in Greenville.

To be awarded for the first time this year is the Smith-Douglass agricultural scholarship, which is provided by Smith-Douglass Co. Inc., Wilmington, N. C., manufacturers of fertilizers and chemicals.

Two-year awards valued at $750 each are payable as follows: freshman year, $300; sophomore year, $200; junior year $150; and senior year, $100.

The eligibility of these Smith-Douglass Scholarships is limited to residents of Clarendon, Darlington, Dillon, Florence, Georgetown, Horry, Lee, Marion, Marlboro, Sumter and Williamsburg Counties.

Applicants for all of these scholarships must meet freshman entrance requirements at Clemson, enroll in either the summer or fall of 1955, and specialize in some phase of agriculture or vocational agricultural...
education. The awards are made, according to Dr. Jones, on the basis of the applicant's high school record, financial need, leadership and score made on the psychological placement test required of all freshmen entering Clemson. Winners will be selected by a Clemson faculty committee.

Application forms for these scholarships may be obtained by writing to Dr. J. M. Stepp, chairman, Agricultural Scholarship Committee, Box 792, Clemson, S. C. Applicants must take the required placement test by May 14, and must mail forms by May 15.

The schedule for the placement test is as follows: Clemson, Registrar's Office, April 2, 30; June 13, July 20 and August 24; Charleston, Charleston High, April 16; Columbia, Dreher High, May 14, August 4; Florence, Florence High, May 7; Greenville, Greenville High, March 26; and Spartanburg, Spartanburg High, March 19.

AGRICULTURE STAFF ATTENDS CONVENTION

Clemson was well represented at the Fifty-second Annual Convention of the Association of Southern Agricultural Workers by members of the teaching and extension staffs of the Agriculture and Agricultural Engineering departments. The convention was held February seventh through the ninth at Louisville, Ky.

GREAT GAMMA RHO AWARDS SCHOLARSHIP

Winner of the 1954 Gamma Rho $200 Scholarship is John Parris, Spartanburg county. The check was recently delivered to him by Leon O. Clayton, state boys' club agent. The national award is presented annually to the most outstanding 4-H club in the nation with the most outstanding 4-H achievement, leadership, and scholarship record. The Gamma Rho is a national agricultural fraternity with headquarters at Urbana, Illinois. John is a student at Clemson College.

4-H CLUB NEWS

Curtis E. Wallace of Gray Court and Richard G. Christopher, III of Hodges, former 4-H Club members, have been selected as 1955 delegates in the International Farm Youth Exchange Program.

Curtis will go to Israel and Dick to Denmark. Their selection was based on their achievement and leadership in 4-H Club work and other organizations. Both are members of the South Carolina Master 4-H Club.

According to information received by Mr. L. O. Clayton, state IFYE leader, both men will report to Washington, D. C., on June 11 to complete their orientation. While there they will join other delegates to European and Near East Countries and on June 18 they will sail from Quebec.

They will live, work, attend meetings, and go to church with various farm families for five months in their assigned countries. Some 135 young people from the United States will go to about 40 countries this year.

At the last 4-H Club meeting Bill Dailey, the delegate to Scotland last year, showed slides and made a brief talk on the things he did and saw while he was in Scotland last summer.

It is planned to have Bill Dailey, Fred McLaughlin, and Benny Wiggins present a program which will consist of talks by each and the showing of slides of the three countries they visited last summer as 4-H Delegates. This program will be open to the public and the date will be announced later.

HORTICULTURAL CLUB NEWS

The Horticulture Club sent two representatives to the annual meeting of the Collegiate Branch of the Southern Division of the American Society of Horticulture Science. This was part of the convention of the Association of Southern Agricultural Workers held in Louisville, Kentucky, on February 6th through the 9th. The two representatives were Dan Robinson of Lancaster and Louis Parsons of Georgetown. The boys took part in the Collegiate Branch's proceedings plus the many other Horticulture meetings at the Convention. Funds were provided for the two boys from the treasury of the local Horticulture Club and also from the Horticulture Department here at Clemson.

The Horticulture Club is asking all interested in Horticulture to become members and take part in the many worthwhile activities of the Club.

AGRONOMY CLUB NEWS

The Clemson Chapter of the National Society of Agronomy held its regular bi-monthly meeting Tuesday, February 22, 1955. Election of club officers was held and the following members were elected: President, J. D. Hicks, Jr., of Effingham, S. C.; Vice-President, B. L. Norwood of McBee, S. C.; Secretary, J. M. Gause, of Coward, S. C.; Corresponding Secretary, N. L. Huggins of Johnsonville, S. C.; and Treasurer, J. W. Thomas of Lake City, S. C.

After the election plans were made to have the prospective members attend the next meeting. At this meeting Dr. G. H. Collings plans to show slides on the planning and designs of different college agricultural structures located in the United States.

AG Economics Club News

After several years of inactivity and due to the untiring efforts of Dr. J. M. Stepp the Agricultural Economic majors re-organized The Agricultural Economics Club. This club is affiliated with The American Farm Economic Association and membership in the club entitles a student membership also in AFEA.

The officers which were elected at the first meeting this semester are: Louis Philhouser, President; Homer Anderson, Vice President; George H. Clarke, Secretary; Robert L. Huffman, Treasurer; Dr. J. M. Stepp, Faculty Advisor.
JAMES B COOPER
Professor Cooper was born in Nicholasville, Ky. In 1934 he graduated from the University of Kentucky with a B.S. degree in poultry and in 1938 he received his M.S. from the University of Kentucky. He has had six years of practical poultry farming and hatchery experience. He taught poultry at the University of Georgia for 4½ years before coming to Clemson. At the present he teaches laboratory and theory in Farm and Commercial Poultry Production, Poultry Grading and Processing, Incubation and Brooding, and Seminar courses. Mr. Cooper is active in the Clemson Community Council, Boy Scouts, Parent-Teachers’ Organization, and church work.

GILBERT H. COLLINGS
Dr. Collings graduated from V.P.I. in 1915. In 1917 he received his M.S. from the University of Illinois where he studied under Dr. C. G. Hopkins. He received his Ph.D. from Rutgers University in 1925 under the late Dr. J. G. Lipman. Dr. Collings is the third oldest faculty member from point of service and is widely known, not only in the classroom where he now teaches Soils, Fertilizers, Soil Management, and Advance Soils Lab, but for his fertilizer text, “Commercial Fertilizers” which is used throughout the United States and to some extent in foreign countries. The fifth edition of this text recently came off the press. He has also published some 100 general agronomy and research articles.

RECOMMENDED VARIETIES
(continued from page 3)
This is also widely used for hay, grazing, silage and green manure. Most fertile well drained soil types may be used when planting the seed in May or early June for seed or May through July for hay. When planting for silage soybeans should be planted when corn is planted.

The beans should be placed in the drill of 24 to 36-inch rows at a rate for large seed of 50 to 60 pounds per acre; medium seed will require 40-50 pounds to the acre, and small seed, 30-40 pounds per acre. When broadcasted or drilled solid the seeding rate is doubled.

The recommended varieties of soybeans for 1955 are:

B. L. Walpole, Agron. ’55

He has served as former President of the Pendleton Farmers Society, South Carolina Academy of Science, and as South Carolina representative to the American Association for the Advancement of Science.

DR. G. W. ANDERSON
Dr. Anderson was born in Fremont, Nebraska, attended, and graduated from Ohio State College with a B.S. degree. He continued his studies and received his M.S. at Ohio State College and his D.V.M. was received at Virginia Polytechnical Institute.

This year is the first year of teaching here for Dr. Anderson. He teaches Animal Diseases, Anatomy and Physiology, and Pathogenic Diseases of Livestock. Dr. Anderson taught two years at Virginia Polytechnical Institute before coming to Clemson.

Extra curricula activities include research work as a member of the Experiment Station Staff. Dr. Anderson mentioned golf as his favorite extra curricular activity.

(No picture available)

Oil: Jackson, Lee, CNS 4, JEW 45, Roanoke.
Hay: Oootan, Yellow Gatam.
Silage and grazing: Biloxi.
Small Grains: Oats, wheat, barley, and rye, are grown for grain grazing, and winter cover. In the oats variety test of 1954 Victor grain 48-93, 1953 B.R.S. out produced all other varieties in yielding 126 bushels per acre. Arlington and Fulgrain are also good producers recommended to planters for 1955.

Oats grow well on loams and clay loams. For grain, the time of seeding is from October 1 to November 15. For cover crops or grazing, the planting time should be as soon as possible after September 1. Eight pecks should be planted per acre to grain, 4 bushels per acre when used for cover, grazing, or hay. See

(continued on page 18)
How IH engineers widened the scope of hydraulic implement control with

NEW FARMALL® HYDRA-TOUCH!

The new Farmall Hydra-Touch system provides almost unlimited application of hydraulic power to the control of farm implements and machines, both tractor-mounted and trailing. This widened range of usefulness is made possible by an entirely new type of control valve, developed through the teamwork of IH product design and manufacturing engineers.

The new Hydra-Touch control valve permits the use of either single or double-acting cylinders. With the latter, implements are power-lowered, as well as raised, or can be “nudged” to vary working position with hairline accuracy. Down pressure can be applied. The valves also can be set to provide implement “float”.

Practically any desired degree of control is easily obtained. Up to three control valves may be used and roving cylinders may be applied as required for either unit implement control, or control of sub-units. Cultivators, for example, may be equipped for delayed, selective, and/or unison gang control. Draft point of McCormick Fast-Hitch plows and other implements are hydraulically controlled, resulting in highest quality of work with minimum draft.

For complete details showing why new Farmall Hydra-Touch allows hydraulic power to be more flexible than on any other three-plow or larger tractors, write for free catalogs on New Farmall 300 and Farmall 400 tractors.

INTERNATIONAL HARVESTER

International Harvester products pay for themselves in use—McCormick Farm Equipment and Farmall Tractors...
Motor Trucks...Crawler Tractors and Power Units...Refrigerators and Freezers—General Office, Chicago 1, Ill.
Stilbestrol--The New Wonder Drug

Reuel McLeod, A. H. '55

As every farmer with at least one eye or one ear, or the ability to read braille knows by now, it did not take long for STILBESTROL to reach the crossroads feed dealer after its use in cattle feeds was accepted by federal officials last November. The benefits of STILBESTROL, as well as its limitations, have been observed under practical feedlot conditions on thousands of farms already.

STILBESTROL is like dynamite. It packs a powerful wallop. Only a small quantity (.00035 of an ounce) is needed in the daily rations of fattening steers and heifers for best results.

Actually, the use of this hormone-like substance is not new. The commercial poultrymen have used it with Food and Drug Administration approval for several years. They found it to be most economical when implanted under the neck skin of the young rooster to produce more meaty birds, resembling the typical capon. However, tests show that it was common with implanted cattle to run into adverse effects—high tailheads, udder development, excessive riding in the feedlot, and a lower carcass grade. Presumably, this is caused by too fast absorption of the implanted material. Recent tests indicate that these harmful effects may be overcome when STILBESTROL is fed, rather than implanted. This drug must be used with consideration because if given in adequate quantities, can produce changes in the delicate balance of an animal's glandular activity.

There are many unsolved problems concerning the effect of this drug on cattle. How STILBESTROL works is the question that needs an answer. Research is being done that may provide logical explanations of the observed variation in normal growth. All sorts of claims have been made concerning the results from this drug. However, it is generally accepted that there is less fat and more edible meat on a carcass. Just what is this white powder called STILBESTROL? It is a mammalized drug that resembles the female hormone, Estradiol. Estradiol is the estrogen produced in the Mature or Graafian Follicle. The secretions of ductless glands like the thyroid, are closely related to sexual development and to secondary sexual differences, such as the growth of beards in men. In farm animals, as in human beings, milk production and other reproductive functions are in part regulated by the female sex hormones, one type of which is called estrogen. In medicine, processed estrogen hormones have been used for years in treatment of female disorders involved in pregnancy or menstruation.

STILBESTROL is relatively safe. Rumors, not entirely without foundation, have cropped up about men in drug manufacturing firms becoming sweater girls from handling pure STILBESTROL. Under long exposure, STILBESTROL can be taken into the system through respiration in sufficient amounts to cause glandular disturbances. The chemical can also be absorbed through unbroken skin. But when used in livestock feeds in the quantities limited by law and when fed as recommended, STILBESTROL has been pronounced free of health hazard to farmers and to meat consumers alike. The difficulty with STILBESTROL feeding is in controlling each animal's daily quota. Boss steers can be a problem. One solution is to mix stilbestrol-fortified supplements with ground shelled corn, as was done in an experiment at Iowa State College. Cobs and molasses feeds are also being used as a base with the hormone supplements to give bulk for better distribution among animals.

The addition of STILBESTROL to any supplement in no way changes its keeping qualities. At present, only one company produces the drug for feeding purposes, I. Lilly and Company, of Indianapolis. It is supplied to feed manufacturers under (continued on page twenty)
VAN LOTT, Inc.
430 Meeting St. West Columbia, S. C.

Distributors of
IRRIGATION EQUIPMENT
WEBSTER PIPE JAEGER PUMPS
RAIN BIRD SPRINKLERS BERKELEY PUMPS
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BRAHMA — HEREFORD — ANGUS CROSSES

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Mt. Pleasant, S. C.
Ray M. Buck, Owner
A NEW CLEMSON PRODUCT

BLUE CHEESE

B. L. Ragsdale, Dairy '56

Cheese is one of the oldest prepared foods in the history of mankind. The art of cheesemaking reaches back into the long forgotten centuries of the past, thousands of years before the birth of Christ. The Egyptians were among the earliest peoples to raise cattle. Milk and cheese were valued parts of their diet. Of special interest in the early chronicles of cheesemaking is the legendary story of Roquefort. This “cheese of kings and king of cheeses” was first mentioned in the ancient records of the Monastery of Conques, in the year 1070, and was presumably discovered by accident. Ten centuries ago on the lush Cevennes uplands near Roquefort, France, a shepherd left his lunch of barley bread and native cheese made of sheep’s milk in a cool cave nearby to protect it from the hot sun. A sudden storm arose and he drove his flocks to shelter far from the cave where he had left his bread and cheese. Weeks later he again passed the cave and being a frugal man sought his abandoned lunch. The barley bread was heavy with black mold. Surprisingly, the cheese was covered with a delicate green mold, and nibbling at it, he found it piquant and delicious beyond anything he had ever tasted. The Monks of Conques developed the shepherd’s discovery, and this discovery has grown into today’s production of Blue Mold cheese, which is similar to the Roquefort.

The Clemson Dairy Department started the processing of Roquefort-type Blue Mold cheese in 1942. They cured some 3,900 pounds of Blue Mold in the Stumphouse Mountain tunnel near Walhalla, South Carolina, from 1942 to 1945.

The old abandoned railroad tunnel is a famous landmark in the Piedmont area of South Carolina. The unfinished tunnel was dug before the Civil War when the Blue Ridge Railroad attempted to construct a line through and over the mountains to Knoxville, Tennessee. Clemson College purchased the tunnel in 1951 in order to conduct Blue cheese research and to develop procedures for manufacturing Blue cheese in South Carolina.

The Blue cheese project was halted by the second World War. Since the purchase of the tunnel, the Clemson Dairy Department has been manufacturing Blue cheese under the direction of Dr. D. M. Graham.

Dr. D. M. Graham has made many investigations as to what are just the right ingredients. After trying milk from various breeds of cattle, he came to the conclusion that there was little difference. Blue Mold looks better on white cheese; therefore it is more satisfactory to use white milk.

The method of making Blue Mold cheese is similar to that of making cottage cheese. The whole milk is allowed to curdle and is then inoculated with mold which is grown on whole wheat bread. The cheese is hooped by packing it into round metal forms and it has to be turned three or four times during the first hour.

(continued on page 20)

THE AGRARIAN
Here's what happened to the brother who stayed on the farm

Everybody knows the farm boy who set off to seek his fortune in the glamorous city. You'll find his name gold-lettered on the doors of a million offices. You'll meet him daily on commuter's trains, on subways and buses, at board meetings, on political rostrums, running lunch counters and service stations. The transplanted farm boy made good, and his success has surely figured in the progress of our nation.

But what happened to his brother? What happened to the boy who stayed on the farm, to build his life after the pattern of his parents? Plenty happened!

The country brother knew he couldn't go on farming in the centuries-old tradition with muscle power doing the work. In the Age of Machines, the farm, too, had to be mechanized. Industry provided the machines, and by their use, the country brother transformed American Agriculture. With tractors instead of draft animals, combines instead of threshing rigs, mechanical corn pickers instead of husking hooks, he multiplied his production. His modern, mechanized Farm-Factory now turns out food and fibre at a manhour rate never before approached.

What's ahead for the brother who didn't leave the farm? He hasn't even started! Machines like the Minneapolis-Moline Uni-Farmor illustrate the dramatic forward step thousands of American farmers are taking right now. With his Uni-Farmor, the modern Farmer-Businessman can harvest hay, silage, grain, beans, seed crops, and corn. He can handle all his harvest jobs himself, with the same, basic, self-propelled machine, and do every job in less time and at lower cost than ever before possible. Advances like that will mean new security and independence for the man who farms, an increasing abundance for all of us.

 Minneapolis-Moline is proud to have served the brother who stayed on the farm. We're going to keep helping him build his future with machines like the Uni-Farmor. We figure American Agriculture is safe in his sure hands.
RECOMMENDED VARIETIES
(continued from page 12)
treatment should be provided for oats with 1/2 ounce of Ceresan-M per bushel.

Wheat does best on clay and clay loams of medium to good fertility. Coker’s Coastal, Anderson, Coker 47-27, Taylor, and Atlas are the recommended varieties for South Carolina, and should be planted at a rate of 6 pecks per acre from November 1 to November 30. Testing results show that Coastal yields best at 34.3 bushels per acre with Coker 47-27 next in line producing 33.6 bushels of grain per acre.

Alfalfa is one of the most important forage crops in the United States. It should be planted on fertile, deep loamy soils having porous well-drained subsoils. Soils with high organic matter and mineral plant nutrients are better suited for growing of alfalfa. Seeding should be made with 25 to 35 pounds of thoroughly inoculated seed per acre; the time to seed is in September and October when moisture conditions are favorable. In South Carolina the profitable life of alfalfa is about 4 to 5 years, but some fields have produced profitable yields for more than 10 years. Varieties recommended include: Oklahoma and Kansas Common, Atlantic, Arizona Common (Coastal area only).

Annual lespedeza is an important pasture and hay crop in South Carolina. Of the 125 species of the genus LESPEDEZA, there are only two species of annuals. Varieties of this crop consist of Kobe, Korean, Climax, Rowan (Resistant to nematodes). Lespedeza can be grown on most soil types at the rate of 40 pounds per acre, for seeding. Inoculation is usually not necessary before seed are planted in February and March.

Sericea, lespedeza, a perennial, like its relative, annual lespedeza, can be grown on any soil type in South Carolina. Again inoculation is usually not necessary when planting in March and April. Sericea should be seeded at a rate of 25 pounds of scarified seed per acre. This crop is fast becoming one of our more important grassland crops because it gives returns on soils not suited to alfalfa. Bicolor is valuable for soil protection, and for food and cover for wildlife. The seed are excellent quail food, and it grows well on any well drained soil.

A good pasture grass that is being pushed for growing in the state is Coastal Bermuda. This grass which is a hybrid of the common Bermuda makes more vegetative growth, grows later in the fall, is more resistant to leaf diseases and root-knot nematode than Common Bermuda. When planted alone or with its recommended companion crop, Crimson clover, this grass provides an abundant source of grazing and can also be used to make good hay. Coastal Bermuda may be planted from early spring until early fall in any type soil that is well drained. It can not be propagated by seed, but must be sprigged in 3- to 3½-foot rows, 2 to 3 feet apart in the row.

Dallis grass is one of the more important summer grasses for summer pastures in South Carolina. It will live during dry seasons and will come out quickly when there is sufficient rain. Dallis grass should be seeded in pasture mixtures at the rate of 10 to 15 pounds per acre. In the Piedmont area, Dallis grass should be seeded in early spring but in the Coastal Plains area successful seedings are made in the fall. It will stand heavier grazing than most grasses and still recover. A better stand will result when Dallis grass is planted on fertile, moist heavier soil types.

For winter grazing, tall fescue is being recommended in the varieties Alta, and Kentucky 31. It is a deep-rooted, strongly tufted, heavy feeder plant adapted to varieties of soils, growing best on heavy soils. Seeding should be done in September in the Piedmont section and in October and November in the Coastal Plains Section. When it is mixed with Ladino or Giant strains of White clover, fescue should be seeded at a rate of 10 to 20 pounds per acre. When it is grown with Ladino this perennial produces good quality hay and silage. When there is an abundance of plant food and moisture, it will sometimes make satisfactory growth and supply grazing during the entire 12 months.

The sources of the material found in this article were mimeographed reports made by the Agronomy Department of Clemson College and the Agronomy Handbook for South Carolina.

100-YEAR WAR AGAINST INSECTS
(continued from page 6)
held back the development of rich agricultural and industrial areas of the South until very recent times. As control of malaria mosquitoes has improved and the incidence of the disease has dropped, the South has come into its own agriculturally and industrially.

The chinch bug is credited by some authorities with having made Wisconsin a dairy state. In the early days, Wisconsin farmers generally relied on small grain crops like wheat, oats, and barley. For several years during the late 1800’s, swarms of chinch bugs destroyed these crops. Many farmers became discouraged, abandoned grain, and took to dairying.

All insects, however, are not harmful to man. Pollinating insects — bees, wasps, butterflies, and several other groups — increase the yield of many crops. Pollination — distribution of seed-producing pollen from plant to plant — is no part of their purpose. It is accomplished accidentally as they go from blossom to blossom in search of nectar. The honey bee is by far the most valuable of the insect pollinators; it is a pollinator of some 50 crops.

About 10 years ago, several species of beetles were brought to this country from Australia to perform a weed-eradicating service for western ranchers. These beetles feed exclusively on the Klamath weed, a noxious range plant. They have cleared the weed from 100,000 acres in California, and have been released in Oregon, Washington, Montana, and Idaho.

Methods of controlling insects have advanced remarkably since the days when entomologists could suggest only sanitation, screens, and fly swatters. It wasn’t long ago that the fastidious ate from a table whose legs were set in receptacles containing kerosene to keep crawling insects from reaching the food. Most people kept a cloth spread over the food until they were ready to eat. Southern plantation owners employed small boys to shoo the insects away with large fans.

Scientists keep developing more effective weapons to use against insects. Entomologists investigate the biology and the habits of insects, (continued on page 20)
A new method of seed and fertilizer placement is now available to farmers who are aware of the limitations and imperfections in grain drills which have remained unchanged for many years.

The new ALL-CROP Drill—a product of Allis-Chalmers, and the world’s first quick-hitch, tractor-mounted drill—brings new speed, new accuracy, new performance to the seeding and fertilizing of grain, grass and legume crops.

Seed and fertilizer are accurately metered a new way... in twin bands side by side... faster... at uniform depth. Seedlings are side-nourished... protected from fertilizer burn.

This not only saves costly seed, but produces stronger stands... quicker catches of grass and legumes with grain.

The ALL-CROP Drill fertilizes and plants grain, grass, and legume seed... separately, or all in one operation. Can also be used as a fertilizer spreader alone.

With handy SNAP-COUPLEER mounting and time-saving hydraulic lift, the economy and operating advantages of fully-mounted equipment come to the grain field... in the form of better stands, faster growth, higher yields! Here is another history-making contribution to better farming by Allis-Chalmers.

ALL-CROP and SNAP-COUPLEER are Allis-Chalmers trademarks.

Ingenious Allis-Chalmers Micro-Feed accurately meters the seed... spaces kernels evenly in the row... at faster speeds. Positive Force-Flo system drills or broadcasts fertilizer evenly.

Dotted lines show how new Torsion-Spring design maintains uniform seeding depth in uneven ground. New "bellows-type" spouts allow far greater flexibility. Grass seed is broadcast or band-seeded.
100-YEAR WAR AGAINST INSECTS
(continued from page 8)

searching for weak links on which control efforts can be concentrated. Chemists discover new insecticides. Engineers design improved insecticide applicators. Plant breeders help develop insect-resistant crop varieties. Medical doctors and veterinarians have an important part in the fight against insects that attack man and animals.

Entomologists operate a warning service for farmers. Survey teams keep check on insect buildups and new infestations. Their reports are made available to farmers through newspaper items, radio announcements, and publications. State entomologists gather information about the insect situation in their states: they issue bulletins to the press and relay reports to county extension agents. Federal entomologists consolidate State reports into a weekly report, which is distributed to newspapers and agricultural leaders throughout the country.

MARKETING OUTLOOK
(continued from page 8)

Margins. A marketing margin may be defined as that spread between what the producer receives for his product and what the consumer must pay for the same product. It is an estimate of the charges made by marketing agencies for assembling, processing, transporting and distributing the farm products.

When the problem of buying high priced cuts from low priced beef is examined, it is found that though the steak may cost 97 cents per pound, there are some parts of a steer for which there is no return, some which will yield a very small return, and a very small amount that will bring 97 cents. Since all of these parts cost 30 cents a pound on hoof, in order to clear his investment and realize any return at all, a packer or a retail butcher must sell his steaks at a high price. If that steer were 100 percent t-bone steaks, there would be a basis for argument. Similarly, if that cotton could be ginned and sold as shirts, there would be a basis for wondering about the higher price of shirts. But that cotton must not only be ginned, it must be processed, woven, dyed, and made in shirts. That cotton travels a long way from the freshly ginned bale before it becomes a chartreuse sports shirt. These people must be paid for their services, too. Just think how much a shirt would cost in time and labor if the cotton farmer took over this marketing margin and produced a finished product!

First, he would have to know the technique. Though he can grow the best quality cotton, he probably would know vaguely how that cotton becomes a shirt. Next, the farmer would have to have the equipment to transform his cotton, and finally he would have to get out and actually sell his product on the street corner, from door-to-door or by some other method. All this time which he is spending making and selling a cotton shirt could well be spent in producing more cotton and allowing someone else to take over the manufacturing and sales responsibility.

Another problem confronting the marketing outlook is that of expanding our markets for farm products. This would come about in finding new outlets for our livestock, grain, etc., as well as by finding new products which to put on the market.

STILBESTROL—NEW DRUG
(continued from page 14)

the trade name Stilbosol, a pre-mixed or cut-down form for safety in handling and for greater certainty of even distribution in finished supplements.

Right now it is clear that age, sex, castration and both type and amount of feed complicate the results. Since STILBESTROL is now in cattle feeding, it should be used with extreme care. More of the existing problems should be answered before the farmer should attempt the use of this drug on a large scale. It would be like placing all of your eggs in one basket. The risks are many. This drug at the present very definitely seems to have a place in cattle feeding in the future. However, it should not be thought of as a highly concentrated feed. STILBESTROL has practically no nutritive value at all as a feed, and it positively should not be used as a substitute for feed.

BLUE CHEESE
(continued from page 16)

The next day the cheese is salted and must be rubbed with salt once daily for the next five days.

The cheese is waxed, punched, and carried to the Stumphouse Tunnel for curing. It is left there for about six to eight weeks. Then the wax is removed and the cheese is cleaned and weighed. The cheese is re waxed and put into a 38" room for three to four months.

The production now is about four hundred pounds a week which is a very small amount when compared to the demand.

When the dairy section of the new Food Industries Building is fully completed this fall, Dr. Graham expects to make about one thousand pounds of Blue cheese per week.

Blue Mold cheese is available now at the Dairy Department Retail Store just south of the Dairy Building on the Clemson College Campus.

HEARD HERE AND THERE

College Student's Beatitude

"Blessed are they that run around in circles for they shall become wheels."

Dinner guest at the turkey carving. "will you pass the nuts, Prof?"

Preoccupied Professor: "I suppose so, but I really should flunk most of them."

An Aggie’s father paid his son a surprise visit. Arriving at 2 A.M., he banged on the door of a fraternity house on Clinch Avenue. A voice from the second floor yelled, "Whatya want?"

"Does Bracy live here"

"Yeah," the voice answered, "bring him in."

Statistician: "Every time I draw a breath some human being passes into eternity."

Heckler: "They say listerine is really good for that."

It Means Something

When a man meets a lady and looks her in the eye, she'd better do something about her figure.

Now that Mt. Everest has been climbed, man has explored everything except the bottom of a woman’s purse.

THE AGRARIAN
The Grassland Drill Helps Mine the "Green Gold"

JOHN DEERE engineers have been deeply conscious of the need of farmers for specialized equipment to help them realize the greatest benefits from grass. A typical result of their efforts is the John Deere Grassland Drill which already is giving farmers and ranchers everywhere greater access to this "green gold" by making it possible to reseed and fertilize pastures and rangeland where seedbed preparation is impossible or impractical. The farmer benefits through longer grass periods for his livestock, the improved health of his animals, and better quality animal products. Better use is made of expensive fertilizer, resulting in greater plant population with less seed.

The grassland drill is one of the many John Deere machines designed to help farmers throughout the world to mine the wealth of "green gold."
Enjoy both sides of smoking pleasure!

Feel that mildness Taste that flavor

that's a Cavalier!

You can't help but notice — on campus and off — smart smokers are shifting to king-size Cavaliers. Try them and find out what a pleasure smoking can be when the smoke feels so mild and tastes so good!

Cavaliers give you the world's aristocratic tobaccos blended in an extra length. There is no better natural filter! There is no finer source of delightful flavor! Today's the day. Get Cavaliers... get extra mildness where it counts — in the feel of the smoke!

Graduate to Cavaliers! Light up and feel that Cavalier mildness — so light, smooth and easy! Try a pack of Cavaliers today. See if you don't agree with thousands of smokers who compared king-size Cavaliers with the cigarettes they'd been smoking. Yes...

CAVALIERS ARE KING-SIZE yet priced no higher than leading regular-size cigarettes!

See why, among thousands of smokers interviewed... 8 OUT OF 10 SAID CAVALIERS ARE Milder!