

Great Value of Clover as Crop

Big Returns Obtained From Plant as Builder of Worn Soils.

Of all the legumes grown in Illinois, probably none has greater possibilities for soil improvement than sweet clover, according to O. H. Sears of the University of Illinois. The increased yields of crops following its use testify to the worth of this legume for "soil-building" purposes.

Returns Comparable.

That the returns secured from the use of sweet clover as a green manure crop are comparable with those obtained from other system of farming, is shown by the fact that both first and second year corn after sweet clover yields as well as that on land to which farm manure has been applied when both the sweet clover and manure plots have received limestone and phosphate applications. As an average of the last rotation on four experiment fields located on dark colored soils, the yields were 65 and 62 bushels per acre, respectively, on first and second year corn for both the sweet clover and farm manure plots.

It is of interest to find that on the same fields the response to phosphate fertilization has been more pronounced on plots growing sweet clover than on those receiving farm manure. In fact, in these cases, no increased corn yields have resulted from application of phosphate in addition to the manure, whereas, on the sweet clover plots an average increase of four bushels per acre has been recorded. These results which are typical of those secured throughout the state, indicate that on those soils in need of phosphate applications, greater returns will likely be secured where sweet clover is being used as a source of organic matter than will be obtained where manure is spread liberally.

Potash Profitable.

There are also indications that the purchase of potash salts may become a profitable practice when used on land where sweet clover has been employed for soil building purposes. Particularly on the lighter soils of the state, there appears to be an increasing need for potassium with the increased growth of sweet clover green manure crops.

It appears, therefore, that in order to secure the greatest benefit from the sweet clover crop, consideration should be given to other soil improvement practices which may enhance its value.

Seed Is of Importance in Growing Many Crops

Only the soil itself is a more important factor in the growing of grain, flowers, clover, vegetables, or any crop, for business or pleasure, than the seed used. Farmers and gardeners have no control over the growth in the spring and again before maturity in the fall. There may be a drought, or a flood, or a half storm, and all are beyond the control of man. But he has control over the seed used and his profit or pleasure is largely determined by the sort of thing he sows.

"One has every reason to be suspicious of cheap seed just as one is suspicious of a cheap horse or cow," states W. J. W. Lennox of the Dominion seed branch at Vancouver, B. C. "When you are offered a No. 1 horse at a low price, you immediately start looking for defects, and if you don't know very much about a horse, you will have him taken to a veterinary for examination. Follow the same rule with your seed supply."

More Barley Should Be Cultivated for Stock

Those who have studied the yields of oats and barley over a period of years are of the opinion that, except for sections where chinch bugs are bad or the soils sandy, barley should be more generally grown with a corresponding reduction in the acreage of oats. Figure this out for your own community. Take the average yield of oats and of barley and reduce this to pounds. Then subtract from this the 90 per cent hull which is found in oats and the 15 per cent common to barley. This will give the hull-free grain per acre which on the average will be from 25 to 50 per cent in favor of barley.

Around the Farm

Seed testing is cheap insurance.

Drained soil will become warm earlier in the spring than wet soil.

For temporary pasture during the last half of the season, sudan grass is splendid.

Many successful farmers are specializing in two or three lines to offset the effect of changing price cycles.

By modern methods of sewage treatment, the liquid may be made to contain fewer bacteria than many of our private sources of drinking water.

After a calf is seven weeks old the milk can be entirely eliminated from the ration. Thereafter a vigorous calf will consume 13 pounds of grain daily until weaned at the age of four months.

Severe Tests Prove Cricket Hard to Kill

Dr. Frank E. Lutz, curator of insects at the American Museum of Natural History, and Alfred L. Loomis, a physicist, put a cricket through a series of physical experiments that would have killed most creatures, but the little fellow survived the tests and seemed to chirp for more, the New York World tells us.

Its first experience was in a jar from which the air was rapidly exhausted until the pressure was equal to an altitude of ten miles above sea level. At first the insect was quiet, but in a few minutes it began to clean its hind legs. Then the tube to clean its hind legs. Then the tube to clean its hind legs. Then the tube to clean its hind legs.

"The cricket," says Doctor Lutz, "merely gave a little twitch as though some one had frightened it a bit."

The insect's next adventure was with compressed air. It was put in a tank analogous to caissons used in tunnel building. The pressure was quickly raised and then as suddenly reduced, a procedure no human being could have survived. But the valiant cricket paid little attention to these adventures than to the previous ones.

The following day Gryllus, as scientists call the cricket, was treated to a merry-go-round ride in a centrifuge that whirled at 1,200 revolutions a minute for ten minutes. When the machine stopped the cricket shook itself and chirped as if in thanks for the buggy ride.

Man's Will Mystifies

Why John Humphreys Plummer of Southport, England, should leave practically all of his estate of approximately \$1,250,000 in trust for the endowment of chairs for modern scientific research at Cambridge university is mystifying his old friends. Plummer had been in the real estate business at Southport for more than fifty years. He was never at Cambridge university; never took particularly keen interest in educational matters, and had never been a scientist. His only other bequest was an annuity of \$1,000 to his only surviving son.

Tryout of Air Brake All That Was Needed

The air brake was invented by Westinghouse in 1869. When he was twenty years of age an accident started his interest in railroad problems. While studying unified control of brakes he read of the use of compressed air in drilling the Mont Cenis tunnel in Italy. After his first patent was issued he interested W. W. Card, superintendent of the Steubenville division of the Panhandle railway, and obtained permission to equip a locomotive and four passenger cars for a practical tryout. Shortly after leaving the terminal station in Pittsburgh, as the train emerged from the tunnel at Fourth avenue, the engineer, Dan Tate, saw a drayman drive onto the tracks ahead. Tate reached for the handle of the new brake and brought the train to a complete stop four feet from the prostrate man, who had been flung from his wagon by the rearing of the horses. This proved a wholly satisfactory demonstration of Westinghouse's invention and a few weeks later the Westinghouse Air Brake company was organized, July, 1869.

Simple Way to Handle Child's Fear of Dark

If your child develops a fear of the dark, do you know how to handle it? It is possible to cure him in a very simple way. When you put him to bed tonight, leave the door partly open and a dim light burning in the hall. The child will go to sleep. Then, gradually, close the door a little and dim the light a little every night. If you work patiently, four or five nights will enable you to recondition the child so that the door can be closed and the light turned out. If you do not control the child in this patient way, you may, by shouting at him or spanking him, keep him from whimpering out loud when you put him to bed in the dark, but he will lie in bed trembling with fear. This is not your aim. Your real purpose should be to remove the fear, to recondition the child.—Children, the Magazine for Parents.

On the Safe Side

There are so many "unsafe" things around a home. If a mother will think of such things, serious injury is spared the baby at its investigating age. She can teach the older children to co-operate with her in keeping sharp objects, such as pencils, scissors and knives from the baby's grasp. Medicines and matches may be kept on a high shelf, and while cooking, the handles of pans should not be left in such a position that baby can grab at them and spill the hot liquid. Eternal watchfulness is the price of safety!

Old Roman Sacrifice

The relief of Anaglypha Traiani in the Roman forum represents the sacrifice of the bull, sheep and pig which usually accompanied the purificatory ceremonies or lustrum. Each animal represents a valuable part of the farmer's stock. The ceremonies generally took place at the close of the census and for the army at the beginning of a campaign and probably also in connection with the founding of temples and other similar occasions. The animals were led around the assembly and then sacrificed.

Good Qualities of Fruits

Nutrition and Diet says: "The apple leads among the orchard fruits. It carries small amounts of vitamins A, B, and C. It has definite laxative properties, probably owing to the large cellulose content. The young apple contains a large amount of starch, but as it ripens this is rapidly converted into sugar until when fully ripe it contains little or no starch. The acid content decreases as the sugar increases. In like manner its pectin, valuable in the formation of jelly, decreases with the ripening process. The citrus fruits are next in importance to the apple, and their culture is being enormously increased. Oranges come first. They offer an excellent source of readily assimilable glucose, and for this reason orange juice is used when there is necessity for quick-assimilable carbohydrate which will throw the least burden on the digestive organs. The orange contains both vitamins A and B."

Anger Worth While

A little anger now and then is relished by the best and simplest of men, especially if it takes the form of indignation over wrongs, the unfairness, meanness of others. Thus Charles Dickens was in a perpetually indignant state of mind over the wrongs of the poor, and not only the poor but Dickens benefited from it.

Will a Diamond Burn?

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CHEVROLET—Last year the public bought more than 1,000,000 Chevrolets. This enabled Chevrolet and General Motors to effect one of the most remarkable feats in industrial history: almost overnight, Chevrolet was changed from a 4-cylinder car to a Six in the price range of the four. The new Chevrolet Six is new in every respect: smoother, more powerful, and luxurious bodies by Fisher. 7 models—\$525 to \$725



PONTIAC—Since General Motors introduced the Pontiac Six three years ago, its sales have practically doubled each year. Now General Motors offers, in the new Pontiac, a "Big Six," at the same base price. It has big-car power, big-car performance and big-car luxury in the Bodies by Fisher. It is appealing particularly to families which are "stepping up" in car ownership. 7 models—\$745 to \$895



OLDSMOBILE—General Motors took this long-established car and remade it to provide a fine car at low price. Last year the value of Oldsmobile was so marked that the public bought over 50 per cent more than the year before. The new Oldsmobile models, with Bodies by Fisher, offer still further improvements—and the prices have been reduced! Oldsmobile also has new Special and De Luxe models, with extra features, at slightly higher prices. 7 models—\$875 to \$1035



OAKLAND—General Motors' policy of continuous improvement is nowhere more noticeable than in the new models of the Oakland All-American Six. The distinctive style and advanced engineering principles which Oakland represents have made it a center of unusual public interest at automobile shows. All-American in name, the new Oakland is All-American in its qualities of speed, snap, power and stamina. Fisher makes the bodies. 8 models—\$1145 to \$1375



VIKING—There was demand for an 8-cylinder car of General Motors quality in the medium price field. General Motors chose Oldsmobile to design and build the new car, and three years were spent in its development and test. The result was revealed last month in the Viking, the latest member of the General Motors family. Viking has the world-famous 90-degree V-type engine and Fisher's newest creations in bodies. 3 models—\$1595



BUICK—This famous member of the General Motors family, year after year, has given increasing value. Over 2,000,000 Buicks have been built and sold and of this total 1,500,000 are still serving their owners. The new Silver Anniversary Buick, with masterpiece Bodies by Fisher, comes in three wheel-base lengths. All are powered by the Buick Valve-in-Head engine, which is vibrationless beyond belief. 19 models—\$1195 to \$2145



LASALLE—When General Motors introduced LaSalle, two years ago, it set a style which was widely copied both in America and Europe. The new models are as distinguished as the first. Built by Cadillac, LaSalle enjoys the same mechanical excellence: 90-degree V-type engine of 8 cylinders; transmission that permits gear shifting without noise or clashing at any speed. The bodies, by Fisher and Fleetwood, offer a choice of colors to express individuality. 14 models—\$2295 to \$4900



CADILLAC—What more can be said of Cadillac? For twenty-five years the world's standard of comparison in the fine car field. The choice of kings, presidents and leaders of business and society in every country. To the unparalleled performance of Cadillac's 90-degree V-type 8-cylinder engine has been added the silent transmission and many new advances in design. Your choice of colors in bodies by Fisher and Fleetwood. 25 models—\$3295 to \$7000

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