

# Profit In Alfalfa Crops

Understanding the Requirements of This Forage Is Necessary for the Successful Raising of the Plant

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Alfalfa is one of the most important forage crops that the Missouri farmer is growing today. Its wide adaptability for feeding to all classes of farm animals, its high feeding value and its beneficial effect upon the soil make it a very desirable crop to grow. The idea that it cannot be grown successfully in Missouri is largely a matter of not understanding the requirements of the plant, and as these become better understood there is no doubt that it will be grown to a greater or lesser degree in practically every section of the state. In the rich sections it will be grown on the uplands, and in the less fertile sections it will be grown in the fertile valleys and bottoms.

**Soils Adapted to Alfalfa.**  
Alfalfa is not adapted to all Missouri soils, and there are certain ones on which it is not feasible to attempt

growing, and the crop reaches its best development on such lands in Missouri.

The main essentials to success are to prepare the seedbed well and to use good, strong, vigorous seed. It also grows with little difficulty on well-drained and rich uplands, especially those well supplied with lime. But on average to thin land it requires considerable care to secure a stand and to keep the grass and weeds from taking it. For the small farmer who wishes to grow only a few acres an old feed lot will usually be found to be an ideal place for seeding.

On the thinner lands it is necessary to give certain treatments before it can be successfully grown. Among these are the use of manure, inoculation and lime.

**Using Manure.**  
The Missouri Experiment Station has found that the liberal use of manure is always beneficial on uplands, and in many cases essential to get a good stand of alfalfa. In many Missouri soils the humus has been depleted by continued cropping and it is necessary to replace this before alfalfa will do best. Manure also furnishes a large quantity of available plant food, especially nitrates, which starts the plants off vigorously and allows them to get well set in the soil before winter sets in. An application of from 12 to 15 tons per acre on the thinner lands will give good results.

**Inoculating the Soil.**  
On all uplands that have never grown alfalfa, inoculation is generally of much benefit, and usually necessary to success. Especially is this true in regions where sweet clover does not grow. Where sweet clover grows the land is usually inoculated, for alfalfa uses the same bacteria as are found on the roots of sweet clover. Bottom lands which overflow never need inoculating.

Inoculation is best accomplished by scattering 200 to 300 pounds per acre of soil from a field where alfalfa has been grown successfully, and harrowing it in immediately. This soil should be applied directly ahead of the harrow and not allowed to lie exposed to the sunlight for any length of time, since light will kill the bacteria. Soil for inoculation may also be dried, away from the sun, sifted and drilled in with an ordinary fertilizer grain drill.

**Using Lime.**  
On a few soils in the state which have a tendency to sourness, the use of lime is beneficial in securing a stand of alfalfa, and in some cases is necessary to success. To begin with, however, one should use lime experimentally and if possible learn to grow alfalfa on land that does not need lime. Where lime is used it should be applied at the rate of 3,000 or 4,000 pounds per acre in any convenient form except that from gas works, which contains injurious compounds. Where only a small area is to be limed the ordinary barrel lime, allowed to air or water slake to a powder, may be used.

## EFFECT OF SOIL TREATMENT ON ALFALFA.



The bunch on the left received manure and bone meal. Next bunch manure only.



The two bunches on left from lime plot, 1 ton of lime per acre (small bunch weeds, large bunch alfalfa), the two bunches on the right are from an untreated plot (the smaller bunch showing the weeds).

to grow it. It thrives best in a deep, rich, loose and well-drained soil, and is not adapted to wet bottom lands and level prairies that lack drainage. It takes good land to grow it without considerable care. Rich, sandy bottom lands are best adapted to alfalfa

## Importance of Legumes In Maintaining Soil Fertility

If the humus in our soils is to be entirely maintained, the rotation must contain legume crops, such as clovers and cowpeas. These plants have the power of making use of the free nitrogen of the air in their growth, making it unnecessary to use any great quantity of the supply in the soil. They are usually known as "humus building" crops, because, in order to build up humus in a soil, nitrogen is necessary, and these plants have the power of taking it from the air.

These "humus building" plants, or legumes as they are commonly called, include: Clovers, cowpeas, soy beans, alfalfa, garden peas and beans. If these crops are removed from the land the amount of humus actually added to the soil is small, although since the land is not cultivated while these crops are on the ground, they tend to maintain it. To build up humus rapidly in a soil, it is necessary that these crops be pastured or fed and the manure returned. Or, better still, that occasional crops be turned under. This indicates another factor in maintaining humus, and that is the return to the land of the manure produced, not only from legumes but from grain crops as well. Manure is mostly humic material, and while it returns only about half the humus contained in the crops fed, due to the digestive action of animals, it means a saving of this to the land.

It can readily be seen, therefore, that to maintain the humus of a soil absolutely, and especially if the humus is to be built up, it is necessary to

make wide use of legume crops, to be pastured or turned under, unless feed or manure is brought in from outside the farm. For the grain farmer who makes little manure and who sells the bulk of his crops from the land, resort must be had to the turning under of legume crops if the humus supply is to be maintained.

**Spring Culture of Wheat.**  
Harrowing wheat in the spring is a practice that is receiving considerable attention of late years. Where the ground is compact and hard from beating rains of early spring, followed by rather dry weather, the harrowing of wheat with a drag harrow is a good practice. So far as experiments have shown at the Missouri Experiment station, however, the harrowing of wheat is not always sufficiently beneficial to pay for the work, although where one harrows in clover seed at the same time the practice is usually a paying one.

Where wheat is badly "heaved," the use of a heavy roller in the early spring is a good practice. All depends, however, upon the extent of the "heaving."

When you call the average young man honest he is likely to feel a mild sort of gratification. When you call him competent his chest begins to bulge. When you call him a heart-breaker he slaps you on the shoulder and gives you to understand that he considers you a person of remarkable perception and unerring judgment.

**No Conclusive Evidence of Change.**  
"Five years ago, sir," triumphantly declared the landlord of the Atlantic and Pacific hotel at Whooopopolis, Ok., "there was no town here at all!" "H'm!" replied the hypercritical tourist from the east. "And what makes you think there is one here now?"

**Not Really Serious.**  
"My cases are all simple ones, such as stealing boxes of matches and handkerchiefs, and blamy," said a prisoner at Kingston-Thames court, after 25 previous convictions had been proved against him.—London Mail.

# NEWS of MISSOURI

ORGANIZE BIG ORCHESTRA.

Sixty Musicians to Take Post in Joplin String Band.

Joplin.—The Joplin Symphony orchestra, in which it is expected to have 60 musicians, now is being formed. The organization as planned will be one of the largest and best in the West and the project has the indorsement of all music lovers of this part of the country.

After the orchestra is completed and the players have had sufficient practice it is expected that public concerts will be held.

An invitation has been extended by the management of the orchestra to all in Joplin who have orchestral ability to take part in the practice and become a member of the organization.

The work is under the direction of Victor Kreyer.

**Education by Mail.**

Kansas City.—That a correspondence school will be opened at the University of Missouri next fall was announced by Isidor Loeb, dean of the university faculty, in an address here. This school, he said, will give all Missourians an opportunity to get a university education by mail. The cost of this education, which will include all branches of arts and sciences, agriculture and instruction in the teachers' college, will be only that of postage stamps.

**Alleged Horse Thieves Caught.**

Montgomery City.—Horse thieves entered the barn of W. G. Davis, near here, and after stealing two horses set fire to the barn, causing \$500 loss. Sheriff Verser and City Marshal Robert See caused the arrest at St. Charles of John Gobb of this city and Clarence Poore of Piedmont, as they were attempting to cross the bridge at St. Charles. Police say they were riding the stolen horses.

**Major Bars Place Hunters.**

Jefferson City.—Gov. Major has announced the closed season on place hunters and all others except members of the general assembly and the newspaper men. He said he will be so busy reading bills and disposing of them and conferring with members of the legislature that he will have no time to confer with people about positions to be filled.

**Farmer Killed by Train.**

Trenton.—William H. Kilburn, 64 years old, a farmer living seven miles northeast of Trenton, was struck and instantly killed by Rock Island passenger train No. 1 near Lindell. George Kilburn, his son, is perhaps fatally injured. They were returning home from Trenton when their train became frightened at the approaching train and darted across in front of it.

**Anti-Gambling Law Upheld.**

Jefferson City.—Bookmaking, policy and lottery schemes received a severe setback at the hands of the judges of Division No. 2 of the supreme court. The court sustained the constitutionality of the law and upheld the sentences of several men convicted under it.

**Plea for Julius Lehmann.**

Jefferson City.—An appeal to Gov. Major to restore to citizenship Julius Lehmann, who was one of the members of the St. Louis house of delegates sent to the penitentiary as a result of the Polk bribery crusade, was made by Senator Mike Kinney and others from St. Louis.

**Rich Farmer Disappears.**

Dexter.—Dan Woodfin, a rich farmer and former magistrate of this township, mysteriously disappeared from his home and no trace of him has been found, though queries of all railroads and adjoining towns and extensive search have been made.

**David Buckley Up For Marshal.**

Brookfield.—David J. Buckley of Brookfield is a candidate for United States marshal for the eastern district of Missouri. Mr. Buckley served one term as sheriff of Linn county, and at one time was deputy grain inspector at Kansas City.

**Mayor Thomas Renominated.**

Jefferson City.—Mayor Cecil W. Thomas was renominated for mayor by the Republicans in convention. The other nominees are: For marshal, Antonio Richter; city attorney, H. J. Westhaus; assessor, Charles Bartlett; treasurer, Fred Jens; police judge, Al Walker.

**Highway Plan Takes Shape.**

Springfield.—Delegations of business men from every town between Springfield and Joplin will meet in Springfield in an all day conference to launch a project for the building of a stone road between Springfield and Joplin.

**Linn County Wants Farm Adviser.**

Laclede.—The Laclede Commercial club made arrangements for a mass meeting of Linn county farmers and citizens to be held in Laclede to arrange for the appointment of a farm adviser for Linn county.

**Both Legs Lost.**

Louisiana.—While attempting to get on the Alton pusher Buford Lefferty lost his footing and fell, the engine passing over both of his legs below the knees. He was thought to be on his way home in Bowling Green.

**Full Pardon Given Lehmann.**

Jefferson City.—Julius Lehmann of St. Louis, who served several years in the penitentiary for accepting a bribe while a member of the St. Louis house of delegates, received a full pardon carrying with it the restoration of citizenship from Gov. Major.

**Board Orders Frisco Reconstruction.**

Jefferson City.—The board of railroad commissioners ordered the Frisco road to reconstruct its road from Kansas City to Springfield, using 75-pound rails for that purpose.

## SWALLOW HAD LONG JOURNEY

Positive Proof That Bird Traveled the Distance From England to South Africa.

The capture of a swallow bearing an aluminum ring in Natal, South Africa, the other day, has resulted in an astonishing insight into the migratory habits of birds. From a number and address stamped on the ring it was discovered that the swallow was one of 11,483 British birds marked in a similar way last summer by enthusiasts, desiring to learn more as to the routes taken by bird migrants, and whether birds return again to their previous nesting sites. This systematic marking of birds began in 1909, since when nearly 32,000 have been "ringed." About three per cent. are afterward noted, but the swallow reported from Natal appears to have made the longest flight so far. A black-headed gull ringed as a nestling in Yorkshire in July, 1911, was found in February, 1912, in Flores, Azores. A starling ringed in Berkshire in January, 1912, reached Helsingborg, Finland, in April. A teal ringed in Staffordshire in the autumn of 1910, was found at Dalarna, Sweden, July, 1911.

## BURNED AND ITCHED BADLY

539 Lincoln Park Blvd., Chicago, Ill.—"A year ago I received a very severe burn on my left arm. I caught cold in it and it was all sore and ulcerated. The sore was as large as a silver dollar. It was all red and inflamed and had pus running out of it. I suffered terribly from burning pain; could not sleep for two weeks it burned and itched so badly. I applied Salve, Salve and a salve my druggist recommended as his own, but got no relief. I then commenced using the Cuticura Soap and Ointment. I bathed the burned parts with Cuticura Soap and applied the Cuticura Ointment on a linen bandage. I got relief from the first, and my arm healed nicely. I was soon able to be at work again. Had I used Cuticura Soap and Ointment at first I would have avoided lots of suffering." (Signed) Harry Junke, Mar. 9, 1912.

Cuticura Soap and Ointment sold throughout the world. Sample of each free, with 32-p. Skin Book. Address post-card "Cuticura, Dept. L, Boston." Adv.

## A SUGGESTION.

"Man is but clay, after all." "In order to keep up with the times, I suppose a modern man ought to be made of reinforced concrete." "Cruel to be kind." "What makes you carry that horrible shriek machine for an automobile signal?" "For humane reasons," replied Mr. Chuggins. "If I can paralyze a person with fear he will keep still and I can run to one side of him."

## A GRATEFUL OLD MAN.

Mr. W. D. Smith, Ethel, Ky., writes: "I have been using Dodd's Kidney Pills for ten or twelve years and they have done me a great deal of good. I do not think I would be alive today if it were not for Dodd's Kidney Pills. I strained my back about forty years ago, which left it very weak. I was troubled with inflammation of the bladder. W. D. Smith, Ethel, Ky., writes: "I take Dodd's Kidney Pills now to keep from having Backache. I am 77 years old and a farmer. You are at liberty to publish this testimonial, and you may use my picture in connection with it." Correspond with Mr. Smith about this wonderful remedy. Dodd's Kidney Pills, 50c. per box at your dealer or Dodd's Medicine Co., Buffalo, N. Y. Write for Household Hints, also music of National Anthem (English and German words) and recipes for dainty dishes. All 3 sent free. Adv.

## Where It Happened.

A seven-year-old colored boy was before Judge Taylor in juvenile court not long ago for shooting at his playmate with a rifle. As is customary in all such cases the attorney in questioning the boy asked: "You were in the state of Indiana, Marion county, when this happened, were you not?" The little fellow studied a minute and then answered: "No, sah. Ah was on th' front porch."—Indianapolis News.

## Meaning the Billows.

"I understand Perditia flirted with some high rollers at the beach last summer." "So she did, and nearly got drowned."

## Its Nature.

"What's the weather report?" "Drying great guns." "Great report!"

## HIS CHANCE.



Mrs. Henpeck—Why, I only married you to spite Dick Jones.

Mr. Henpeck—Glad to hear it. Herefore I thought it was because you had a grudge against me.

Envy.

"Bliggins is one of those people who envy others the slightest elevation above ordinary surroundings."

"Yes. His family can't eat a meal without being afraid he'll get jealous of the baby and want the high chair."—Washington Star.

**Warning to Women.**

Very Meek Husband—I just finished writing your speech for the club, Mariah.

His Wife (not so meek)—What's the subject?

Very Meek Man—"The Lady Who Will Strike Her Husband Is No Man."

Satire.

## QUININE AND IRON—THE MOST EFFECTUAL GENERAL TONIC

Grove's Tasteless Chill Tonic Combines both in Tasteless form. The Quinine drives out Malaria and the Iron builds up the System. For Adults and Children.

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Speaking of "human dynamo," there is a man who has everything charged.

**Proof Positive.**

"How did the new play go?"

"Like a breeze."

"Then somebody raised the wind."

Many have smoked LEWIS' Single Binders cigar for the past sixteen years. Always found in reliable quality. Adv.

**No Change.**

"I saw young Sappley the other day."

"Well, did he look like himself?"

"Yes; still insignificant."

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## Woman Is As Old As She Looks

No woman wants to look old. Many in their effort to look youthful resort to the "beauty doctor's" prescriptions. Their mistake is that they visit the wrong department in the drug store.

Beauty depends upon health.

Worry, sleepless nights, headaches, pains, disorders, irregularities and weaknesses of a distinctly feminine character in a short time bring the dull eye, the "crow's feet," the haggard look, drooping shoulders, and the faltering step.

To retain the appearance of youth you must retain health. Instead of lotions, powders and paints, ask your druggist for

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## Universal Hero.

For America, at least, there is the one universal hero. No one questions his greatness. None names him but to praise.

Who is this universal hero?

Is it Napoleon? Many condemn him, as Ingalls did, as the "imperial personification of force and murder."

No, it is not Napoleon.

Washington, then? Wendell Phillips said: "But the great Virginian held slaves." So, even Washington had his detractors.

Lincoln? Perhaps later on; but not yet.

Well, who is this universal hero of America?

John Hampden, of course. He objected to paying taxes.—Kansas City Times.

## Important to Mothers

Examine carefully every bottle of CASTORIA, a safe and sure remedy for infants and children, and see that it bears the Signature of *Dr. J. C. Watson*.

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## Plea for Liberty.

Mrs. B. was entertaining a few friends and Elsie was allowed to remain in the room, provided she made no disturbance. But she was interested and talkative and asked so many questions that at last her mother became exasperated.

"Elsie, if you open your mouth another time, you'll have to go back upstairs. Now, remember!"

Elsie was accustomed to obey, so for a long time Elsie's lips were kept tightly closed. At last, however, she touched her mother and said softly:

"Mamma, can I open my mouth if I don't say anything?"—Chicago Tribune.

Corrected.

"Bliggins always knows the latest story."

"Not the latest," replied Miss Cayenne, wearily, "the longest."—Washington Star.

## SUITED HIM.

"I've just been reading in this history of France all about Charlotte Corday. She sure was a great dame, all right."

"Killed a guy what was taking a bath."

The Exposition.

"You are mine!" cried the impecunious nobleman as he embraced the heiress.

"Yes," said the latter, "a gold mine."

## A WONDERFUL DISCOVERY.

In this age of research and experiment, all nature is ransacked by the scientific method and the progress of man. Science has indeed made giant strides in the past century, and has brought to us the most important discovery in medicine is the attention of French scientists and that it is worthy of the attention of those who suffer from kidney, bladder, nervous, rheumatic, chronic weakness, uric acid, gout, sciatica, etc. There is no doubt. In fact it seems evident that the big cure created among specialists, the THERAPION is destined to cast into oblivion all those questionable remedies that were formerly the sole resource of medical men. It is of course impossible to tell you all the details of this discovery, but in this short article, but those who would like to know more about this remedy that has effected so many—write at once, asking for a free book, Dr. L. C. Med. Co., Havana, Cuba. If you are in London, Eng. and desire to know whether the THERAPION is the same as the THERAPION, No. 1, No. 2, No. 3, it is what they require and have been seeking in vain during a life of misery, suffering, ill health and unhappiness. Therapion is sold by druggists or mail. Dr. F. J. B. F. 300 Temple St., Springfield, Mass.

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