# Bokhara, Bread Cast Upon the Waters, Returns After Many Days to Become Pasture for the Busy Bees that Pollinate the Blossoms and Make Certain the Fruit Crops

## BOKHARA, BREAD CAST UPON THE WATERS RETURNED AFTER MANY DAYS

It is a Far Cry From the Khanate of Central Asia to Brown's Island, But All the Long Way Came the Seed Which Makes a Plant That Every Fruit Man Should Grow for His Busy Bees To Pollenize His

Sweet, or Honey clover by every

(Melilotus Alba)

ed stays until plowed under.

and will grow on any land.

the wettest land, but does well on

It is a plant of Asiatic origin.

parts of this country for many

very large demand from all parts

and has proven a very profitable

crop, as it is an abundant yielder

Where it has not been grown

before it is advisable to inoculate

the seed before planting, as it is

but has been grown in various

for bees.

high dry land.

and a sure crop.

A few years ago this was class-

czar, prebebly through many generations and by the way of many ago to Brown's island some the water of the Willamette river.

was cast upon the water that returned after many days; and that this request. This ought to rewas no doubt the Bible simile, re- sult in the planting of Bokhara. ferring to seed sown in Egypt on the rising spring freshet waters of

farm on Brown's island, about three miles up the about ten years ago found clover growing on his land. It had no loubt sprung up from seed that ley when the river was high; as | Mr. White:) a part of the Savage farm is overlowed every winter.

Mr. Savage has ever zince that time been raising this clover, from the original start that came to him on the winter's flood, like manna rained on the followers of loses as they were led from the and of Egypt through the desert to the promised land.

It Is a Great Feed Mr. Savage finds this Bokhara. s Sweet, or Honey, or White lover fine for pasture. It is also

great for bee pasture, with its thite blossoms that furnish the little workers with great loads of sweetnes to carry away to their pulous wing-lit hive cities. Mr. Savage says this Bokhara

lover furnishes him the finest ow feed of anything he can grow. t vields great crops; greater than alfalfa. (At first he thought it vas alfalfa.) It is better feed for milk cows than alfalfa because it oes not bloat the animals like al-

The Bokhara clover grows as Brown's island farm of Mr. Sav-He thinks it is as good or ecause it has a great root system, with all the nodules and all the ther characteristics of the memers of the legume family.

A'Bokhara Booster (Harley O. White, of Salem. regon, is one of the best posted en in this section on clovers and rather hard to start on land that clover seeds. He is a member of has not grown clover.

oculate the clover seed.

eds have been repeatedly tried No. 4. out with success:

First: On well drained hill It is a far cry from Bokhare. the firm of D. A. White & Sons, from the small seed box attach-Russian Asia, to Brown's island feedmen and seedmen of Salem, ment to the grain drill. The furbut all the way from that khanate and this firm buys the great bulk row openers of the drill serve to that paid tribute to the murdered of the clover seed crop of this sec- cover the seed. In other cases. tion. Mr. White was asked by the it is simply broadcasted after the Salem slogan editor to furnish drilling is done and the fall rains lands, there came, some ten years something for this edition on cloy- are depended upon to beat it into er-with especial reference to the the soil. This method is often clover seed. It came floating in best clover for bee pasture. While unsuccessful because of periods Mr. White is a very busy man, es- of freezing and thawing which It was the veritable bread that pecially at this season, he found heave the small clover plants entime yesterday to comply with tirely out of the soil. However, there is always an opportunity to reseed in the spring.

Second: Clover is frequently

man in this section who has an seeded on fall wheat, oats, barley orchard-first for bee pasture. Any way, Mark Savage, who has and second for the other benefits or oats and vetch, from the midand uses that go with the raising dle to the latter part of Februof clover. Mr. White is a consist- ary, by simply broadcasting the Willamette river from Salem. ent Bokhara booster, and his fa- seed over the grain or vetch field ther, D. A. White, has tried it out whenever the soil is in the proper very successfully as a forage and condition. In case the surface is also as a cover crop. The follow- lightly frozen, the seed may be had floated down from up the val- ing is the article furnished by simply broadcasted on the frozen land and the thawing will serve to get it sufficiently covered for Bokhara, Sweet or Honey Clover germination. If the land is dry enough for cultivation, the clover ed as a weed, but it is now grown very extensively all over the United States and is being found to not only cover the seed but will muich and to keep the weeds be a very profitable crop, being be beneficial to the cereal crop. In many cases, however, it is inused as a forage crop and as a advisable to harrow the vetch. It is undoubtedly the best of In case the spring growth of the all clovers as a bee pasture, mak- cereal or vetch begins, it is necesing a rapid growth and once seed-It is a very valuable plant for soiling purposes. It is a legume no harrowing is possible. In such cast the seed and harrow it in and is now grown in this valley case, the rain usually beats in lightly. both as a pasture crop as well as enough of the seed to secure a The leaf resembles alfalfa, but the plant is much more hardy and will stand much more pasturing It seems to thrive especially on

seeded with various types of early good method.

Blossoms.

Usually spring oats or spring The methods for seeding red wheat is seeded at this time, and clover and alsike clover are iden- the clover is broadcasted ahead tical, except that different quan- of the drill. This method is very titles of seed are used. Twelve satisfactory with both wheat and pounds of red clover seed is usu- oats if the seeding takes place ally sown per acre, and eight early. In case the seeding is depounds of the alsike seed is ordi- layed until a somewhat later narily used. The following meth- period, it is better to use method

Fourth This method consists of sowing with barley, usually lands that are not heaved by some time in April, in the same freezing and thawing, clover may manner as is done with cats unbe seeded at the same time that der method No. 3. However, if wheat, oats, or barley is your soil is likely to dry out and planted. The method used is to it is getting somewhat late in the broadcast the seed ahead of the season, it is best to use beardless grain drill either by hand or barley, as this offers less competition to the clover.

> Fifth: This method is adapted to a farm where a considerable amount of sheep or hog pasture is needed. It consists of broadcasting about five pounds of rape together with the clover seed over the field about the middle to the latter part of April and harrowing it in lightly. In from six to eight weeks the rape is big enough to be pastured off, and if the land is dry enough, sheep or hogs can be turned on and they will keep the rape pastured down but, unless excessively close pasturing is allowed. will do no damage to the clover plants. Hogs of course should be ringed to prevent rooting.

Sixth: In case the land is in very poor physical condition or is badly infested with weeds, may be necessary to sow the Following out this clover alone. method, the land should be manured if possible, plowed early in seed should be broadcasted and the spring, and kept well cultiharrowed in lightly. This will vated in order to maintain a good down until seeding time, which is about April 20 to May 10. The seed is drilled in about one inch if suitable machinery is available for sowing at this depth. Great sary to get the clover seeded as care must be taken to avoid sowpromptly as possible, even though ing too deeply. In case the drill the field be somewhat soft and is not used, it is best to broad-

These methods are all successstand. The seeding must take fully used in getting stands of place by the last week in Febru- red clover under western Oregon ary or very early in March, be- conditions, and of them, I prefore the spring growth begins, for the second, fourth and sixth lest the cereal smother out the methods for general farm conditions, but in case of need for Third: Clover is frequently livestock pasture, the fifth is a

# WHY AND WHAT IS A LEGUME? IS A **OUESTION ASKED AND ALSO ANSWERED**

They Are the Only Family of the Vegetable Kingdom Capable of Taking Nitrogen From the Air and Making it Into Nitrates, Thus Renewing and Adding to the Fertility of the Soil.

Why is a Legume?" is furnished stress of dire necessity, that of

the National Garden Bureau): Modern gardening literature nitrate factory, and it does its has a great deal to say about work secretly and underground.

Just what is a legume? pea and bean produce them. The are the nitrate factories. ily and one of their character- gen and storing it. So is the sweet pea and the white procurable at seed stores. They all have butterfly shaped or two-winged flowers.

(The following on "What and discovered during the war under by the current weekly circular of taking nitrogen from the air and Each legume is a miniature

fertilizing by legumes and the It is the only family of plants advisability of planting legumes possessing this characteristic. so that they appear from time to Pull up a pea or bean, or dig time in every portion of the gar- up a clover and look at the roots. A legume, strictly speaking, is little knots or bumps which the may be inundated for several days on the mellow soils well supplied You will find them covered with seed pod of certain form. The botanists call nodules. These with pea and bean produce them. The are caused by small organism, a emerge uninjured. Alfalfa roots physical condition and low in humany other plants belong to a bacteria or bacteroid, which has some time clog tile drains, but family known as the pulse fam- the faculty of grabbing the nitro- only where water runs through Where a during most of the growing seaistics is that they bear their legume grows, some of these son, seeds in legumes, so the term le- nitrogen gathering bacteria are gume is applied to any member left in the soil. It is now possible late the land for alfalfa in westof the family. The wistaria and to inoculate the soil with them ern Oregon or in sections where the white locust tree are legumes, through cultures very cheaply it is not commonly grown.

Plowing under the legumes is now recognized as a scientific way But the remarkable thing about of manaring. the legume is that it has always filled with nitrates provide the possessed a secret for which scien- nitrogen in proper form for the tists have striven for years and plants besides adding to the tex-

a successful crop. Where alfalfa counties. It is rather successful is successful no other forage crop on the farm, well drained sandy and gravelly loams of the Wil-The soils best suited to alfalfa lamette valley river bottoms. On are the mellow types, well aerat- the average medium heavy soil and sweet, but the crop does of the Willamette valley, it is well on all soils that are deep, not as successful as clover. Folwell drained and sweet. It will lowing are reasons: 1. Alfalfa is frequently injurnot reach its best development in a shallow soil; it will not do ed during the winter. It seems at all well in an acid soil, and it to be only semi-dormant and duris a failure on poorly drained ing the mild wet season is often lands. The best soil is the sandy attacked by disease. 2. Many Willamette valley soils leam, six or more feet in depth. which is warm and which can be are too wet. 3. Most Willamette valley soils well watered. At least six feet

of soil is needed for the deep are sour and limestone for corrooting system. These roots fre- recting acidity is too expensive quently go ten feet or more, and for economical application. 30 to 40 feet is not uncommon. 4. It is established with great-

Alfalfa will not penetrate bed- er difficulty than clover on averrock, but it does make its way age soils. through the softer hardpans and frequently have bad We layers of clay. Alfalfa does best weather when the first crop is

on soils well supplied with hu- ready in May or early June for mus. It will not live when cov- hay. ered with stagnant water, or even 6. Grasses and weeds grow dur-

where the standing water is very ing the winter while the crop is close to the surface of the soil. dormant. However, alfalfa on bottom land

Alfalfa is more easily started moving water while the with organic matter. It is often plants are still dormant and will hard to start on soils in poor

> Land for alfalfa should usually be manured with well rotted manure at 10 to 15 loads per acre. This should be disked in thoroughly and plowed under in the fall or very early in the spring As soon as dry in the spring it should be worked down and must be kept harrowed frequently to maintain a mulch and to kill

### ALFALFA IN WESTERN OREGON 15 ALL RIGHT ON SOME OF OUR SOILS

In the Willamette Valley It Is Successfully Grown in the Warm and Well Drained Sandy and Gravelly Loams -Clover is Better, However, on Most of Our Soils.

there it was carried to cally every state of the union, and Greece, then to Rome, and from in numerous instances is making

(The following is the part of there to Spain and probably to Circular 59 of Oregon Agricultu- northwest Europe. In Europe al college on "Alfalfa" under States it is called lucerne. It was the heading of "Alfalia in West- introduced by Spaniards into ircular being G. R. Hyslop, pro- California, and finding very favfessor of farm crops, and the date orable conditions there, it became established and is recognized as Alfalfa is one of our oldest cul- the best forage crop. It has since have originated in western Asia. been exploited throughout practi-

It is often necessary to inocu-

Alfalfa in Western Oregon.

well drained and swept soils pre-

vailing in many of the valleys of

ackson, Josephine and Douglas

Alfalfa is a success on the deep.

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# CLOVER FOR WESTERN OREGON, FROM THE AGRICULTURAL COLLEGE VIEWPOINT

There is No Leguminous Crop Which Gives as Good Return to the Acre and at the Same Time Contributes As Much to the Upbuilding of the Soil in Western Oregon.

very successful crop on many poorly drained type, the alclover is considerably bet-

(The following is Circular 77 | mers experience with the crop is of the Oregon Argicultural college in getting it started. There are than the white blossom type and and come into bloom. It should extension service on "Clover for very few farms of western Oreestern Oregon," the author be- gon that do not have soil that is growth, and is more likely to be-George R. Hyslop, professor adapted to one or the other of these types of clover, but in many small yellow is an annual type and mer soiling crop and should be There is no leguminous erop cases it is rather hard to get a is not as productive as the large cut high. When somewhat coarse, which gives as good a return per stand. Clover responds well to white blossoms, type of sweet acre in the form of hay or seed liberal use of barnyard manure. and which at the same time con- This is especially important on tributes so much to the upbuild- land in poor physical condition, ing of the soil of western Oregon as it makes successful starting of as does red clover or alsike clo- the crop more easy. Where barn-On any soil that is reason- yard manure is not available, the deep, fairly mellow, and plowing in of green manure gets drained, the red clover is good results. If the fertility of

quite likely to be successful. It the soil is poor, an application of loes best on the soils that are 25 to 30 pounds per acre of land free from acid, but it is also a plaster early in March, either bethat are rather sour. For fore or after seeding, is a great the low, wet, heavy soils, such as help. In sections of the state white lands and similar heavy where clover has not been previously grown, it will be well to secure culture from the depart-The difficulty which most far- ment of bacteriology of the Ore-

### DATES OF SLOGANS IN DAILY STATESMAN (In Twice-a-Week Statesman Following Day)

oganberries, Oct. 7. Prunes, Oct. 14. Dairying, Oct. 21. lax, Oct. 28. liberts, Nov. 4. Walnuts, Nov. 11. trawberries, Nov. 18. pples, Nov. 25. Raspberries, Dec. 2. Mint, Dec. 9. reat cows, Dec. 16. Blackberries, Dec. 23. Herries, Dec. 30. ears, Jan. 6, 1921.

ooseberries and Currants, Jan. Corn, Jan. 20. Colery, Jan. 27. Spinach, Feb. 3. nions, Feb. 10. otatoes, Feb. 17. Bees, Feb. 24. Mining, March 3. loats, March 10. leans, March 17. Paved highways, March 24. roccoli, Marcr 31. egumes, April 14. Asparagus, April 21.

Grapes, April 28,

Drug garden, May 5. Sugar beets, May 12. Sorghum, May 19. Cabbage, May 26. Poultry and Pet Stock, June 2 Land, June 9. Dehydration, June 16. Hops, June 23. Wholesale and Jobbing, June

Cucumbers, July 7. Hogs, July 14. City Beautiful, flowers and oulbs. July 21. Schools, July 28. Sheep, Aug. 4. National Advertising, Aug. 11. Seeds, Aug. 18. Livestock, Aug. 25.

Automotive Industry, Sept. 1. Grain and Grain Products. Sept. 8. Manufacturing, Sept. 15. Woodworking and other things, Paper Mill, Sept. 29.

for sale at 10c each, mailed to may be done by either broadcastany address.)

CROP FOR PLANT AND FOR SEED And It Is One Of the Crops That Ought To Be and Must Be Raised More Extensively to Furnish Bee Pasture For the Workers Necessary to Pollenize the Fruit

clover known as the "white blosgrown as it is biennial in its habt and is one of the better produc- the second season. low blossomed sweet clover may sweet clover is somewhat shorter is more spreading in its habit of come a pest in the meadows. The Sweet clover is in many cases conever, there are places in which it other of the good leguminous plants and it is not as palatable. objectionable to most stock. It is it and thrive upon it. Where peas, vetch, clover or alfalfa are sucessful, it is inadvisable to grow weet clover, but on badly run- with comblike strippers. down soils where other iexumes annot be grown, oftentimes sweet lover will start more readily and may be utilized for feed or in getting the soil into condition to pro-

Seed of sweet clover is often nard and germinates poorly. Three types are available: (1) Scarified or scratched, (2) hulled. and (3) unbulled, and usually germinate in the order mentioned. germination and purity test should always be made at the seed testing labratory.

duce alfalfa or some other legumi-

nous crop. If the soil is thin,

rocky, scab land, or somewhat al-

kaline or otherwise poor, often

weet clover may be grown with

success as a hay or pasture plant.

t responds to inoculation as does

The sweet clover should be (Back copies of Salem Slogan March or April. On good land used for hay if a better plant caneditions of The Daily Oregon seeding usually takes place in not be grown. Statesman are on hand. They are April or very early in May and ing or drilling on a good seed

(Following is Circular 78, on | bed. Under Ordinary conditions to Sweet Clover," by the Oregon | which sweet clover is adapted, Agricultural College Extension broadcasting is done. Where posservice, the author being G. R. sible, it should be harrowed in. Hyslop, professor of farm crops:) Sweet clover is best as a pasture There are two types of sweet plant and must be kept pastured back closely, otherwise it will get som" and the "yellow blossom." too coarse and woody. It may be The former is more extensively pastured in the latter part of the first season and the early part of ers of food for livestock. The yel- plant, it is less valuable owing to be divided into two types—the its succulence and the difficulty large biennial type and the small of curing it, and (3) the ease with annual type. The large blennial which its leaves are lost. For hay it is cut before it begins to branch

Sweet clover is used as a sumclover so that where the latter to make rather good sheep and

For some time the seed industry sidered a weed and a pest. How- especially for white sweet clover is distinctly valuable. It is more bines well with pasturing. The nutritious than is alfalfa or the pastur ng may be carried on until Coumarin, which gives a velop. It is usually cut with a selfdistinctly strong flavor which is rake reaper and is thrashed with an ordinary clover huller, aleating sweet clover. After they a machine is not available, the or-

15 cents per pound up to, in some

to 1000 pounds of seed per acre. just past full bloom. Use of cultivated crops is also good. If sweet clover goes to seed on the land. usually it keeps the place pretty well re-seeded and in the presence of a large quantity of hard may be some sweet clover developturned up.

There is a good market for the seed of this plant, but the final or ultimate use to which the sweet and experimental period is over will in all probability be for pasplanted at 15 pounds per acre, if turing on many lands too thin or full stand is desired, especially too dry to produce other crops: if it is to be used for pasturing also it will be valuable for green purposes. If the germination manuring purposes on certain falls much below 80 or 85 per fields on which it is difficult to cent, it is necessary to increase start alfalfa or some other of the the amount. For pasture on thin better legumes. Sweet clover is an land, five to eight pounds per acre excellent forage plant on soils too are broadcasted in February, alkaline for alfalfa and may be

(Continued on page 7)

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