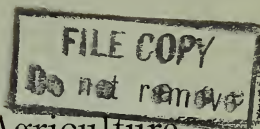


Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.

FEB 23 1922

EXPERIMENT STATION FILE



Reserve

760.9

P69

United States Department of Agriculture,

BUREAU OF PLANT INDUSTRY,

Forage Crop Investigations,

WASHINGTON, D. C.

COMMON VETCH OR TARES (*Vicia sativa*).

Common vetch is an annual legume of high value for green manure, soiling, hay, and pasture. It is eaten with relish by all kinds of stock. In Europe two general varieties are distinguished, namely, winter vetch, sown in the autumn, and spring vetch, sown in the spring. The former is somewhat more cold resistant. Pearl vetch is a form with white seeds which may be used as human food.

Common vetch is largely grown as a winter crop in the South and in western Oregon and Washington for hay and pasture, and in California as a green-manure crop in orchards. In the North it is grown only to a slight extent as a spring crop. It should be used much more extensively where the winters are mild, as it is a very valuable crop in itself and besides is a splendid nitrogen gatherer. It can be used in rotation with cotton or corn to great advantage.

Seed.—The seed weighs 60 pounds to the bushel, and much of it is imported. Large quantities are now grown in western Oregon. It costs from 2 to 3 cents a pound and remains good for several years.

Sowing.—Where the winters are not severe, vetch should be planted in the autumn, from the middle of September to December. It may also be sown in early spring, and this is necessary where the winters are very cold. Vetch will not withstand hot weather, and so must be planted early. In planting use a bushel of vetch seed and a bushel of oats. The latter is necessary to support the vetch. Rye or wheat is sometimes used in place of the oats. The seed may be broadcasted on stubble and worked in with a disk harrow, but it is better to sow on well-prepared land.

Inoculation.—In planting vetch for the first time, especially in the South, a common result is to get a "spotted" field. The healthy vetch plants will be in patches and the remainder turn yellowish and die. This is due to the lack in the soil of the germs that make the nodules on the roots of the vetch, and without these nodules the vetch will not thrive. If a spotted field is planted again the next season it is practically certain that all the plants will be noduled and vigorous.

A new field can always be inoculated by scattering soil from an old vetch field at the rate of 500 pounds per acre. This should be done just before planting the seed. There is objection to using the soil method, as it serves to spread weeds and plant diseases. Another method is to use the pure cultures prepared by the Department of Agriculture. Even where soil is used it is desirable to use the cultures also. After land is once inoculated it will remain so for many years.

Feeding.—Vetch may be used either for soiling or for hay, and in some cases for pasturage. It makes excellent green feed for dairy cattle, and by making second sowings it can be fed in late autumn and from March to May. It should be cut for hay just when the first pods are half formed. If the weather is unfavorable the crop can be converted into silage, of which it makes an excellent quality.

C. V. PIPER,
Agrostologist.

JULY 7, 1909.

