

Pasture and Grain Crops for Hogs in Pacific Northwest

Contributed by Byron Hunter of the Board of Plant Industry, United States Department of Agriculture.

 This is the last of a series of articles dealing with crops and systems of cropping for pork production, prepared by Mr. Byron Hunter, who is now state leader in charge of farm-management-field studies and demonstrations in the State of Washington, and employed co-operatively by the United States Department of Agriculture and the State College of Washington.

N RICH, mellow land that retains moisture well artichokes usually yield better than potatoes. But on land that dries out quickly the yield is not very satisfactory.

The hogs are turned in late in the fall, about the time that alfalfa or clover pasture is failing. Some allow the hogs to work on the tubers at will from the last of October until May 1. Others prefer to use artichokes only in the late fall and early spring, the hogs being removed from the field during the winter, when the ground is so wet that their rooting will puddle the soil. The hogs are returned to the field as soon as the ground has settled in the early spring. Used in this way artichokes fill in two periods, the late fall and early spring, when green feed is scarce. As with the root crops, hogs must also receive a grain ration of some kind when feeding upon artichokes if rapid gains are desired. When the ground is frozen hard other feed must be provided.

Many hog raisers use headed or bundle wheat to carry dry brood sows and young shotes through the winter. When feeding upon the unthrashed grain the hogs get considerable roughage in chewing the heads. They are also compelled to eat more slowly and to masticate their food better than when feeding upon thrashed grain. When the grain is fed in the straw the thrashing bill is saved and the hogs are kept busy during much of the time. Unthrashed wheat and artichokes or roots of some kind make a good combination for wintering hogs.

In some localities field peas are stacked and the unthrashed vines fed to hogs during the late fall, winter and early spring. Mature pea grain is a concentrated feed, very rich in protein. For this reason hogs should receive other feed in addition to the peas to dilute the ration. Any of the root crops, artichokes or potatoes are excellent for this purpose.

Unthrashed Barley.

In using unthrashed bearded barley for winter feed for hogs, a large quantity is thrown into the feed lot at a time in order that the beards and kernels may become wet and soften. If fed dry, the kernels are too hard to be eaten readily.

Arid and Semiarid Districts.

The arid and semiarid districts may arbitrarily be designated as that portion of the wheat belt whose normal precipitation is insufficient to grow alfalfa successfully. In much of this region, however, alfalfa can be grown profitably for hog pasture by keeping the stand very thin and cultivating it thoroughly in the late fall and early spring. If sown rather thinly in rows about 24 to 36 inches apart and cultivated occasionally during the spring and summer, alfalfa will make profitable hog pasture over a very wide territory now considered too dry for that crop.

Wheat is used for hog pasture as follows:

(1) As soon as the surface of the ground is dry in the spring, about April 1, the hogs are turned into the main crop of winter wheat that is grown for market. Some prefer to use the winter wheat until it begins to joint; that is, for about a month or six weeks. Others use it until the hogs begin to chew the heads of wheat, and still others harvest with the hogs in the field.

(2) Spring wheat sown the last of February or early in March is generally large enough for pasture, 3 to 4

inches high, by May 1. By pasturing it rather closely it will stay green until about July 1.

(3) Summer pasture is provided by sowing either spring or winter wheat about May 1. Land that is sown at this date is plowed during the late fall, in the winter, or very early in the spring. To destroy weeds and retain moisture it is kept thoroughly cultivated from early spring until the wheat is sown. The pasture is ready for use in about six weeks from date of planting. If grazed closely, it should remain green until in August.

The common beardless barley is also sown in the early spring and early in May for spring and summer pasture. Barley comes more quickly and makes more feed than wheat. The hogs also like it better than wheat up to the time it has headed out.

Corn and Sorghum.

Field corn and several varieties of sorghum are grown in a limited way in the dry portion of the wheat belt for hog pasture. The principal varieties of sorghum are kafir, Jerusalem corn, milo and Amber sorghum. Just which of these is most satisfactory when grown as a grazing crop or to cut and feed green has not been fully determined. On account of the succulency and high sugar content of its stems as well as its habit of suckering after being cut or eaten down, Amber sorghum is probably the best of the varieties named above. The variety grown is locally known as Early Amber sorghum. Field observations seem to indicate that Amber sorghum is best adapted to the extremely dry districts where the altitude is rather low, and corn to the higher districts. These crops need to be further tested in limited areas to determine which are most profitable.

Corn and sorghum are grown in much the same way. To be successful, the preparation of the seed bed must receive special attention. Perhaps the most satisfactory way to prepare the land for these crops is to plow during the late fall or winter and then cultivate thoroughly from early spring until planting time. Sorghum is planted a trifle later than corn, in rows 3 to 3½ feet with a grain drill. The seed is dropped 10 to 15 inches apart in the row. To firm the soil and cause the seed to germinate quickly, a corrugated roller or subsurface packer is run just behind the drill. The

cultivation is the same as that of corn. The crop is either cut and fed green or the hogs are turned into the field when the sorghum or corn is 14 to 18 inches high. The former method gives by far the most feed.

Corn and sorghum are generally used in a 2-year rotation with wheat or barley, the land being in sorghum or corn for summer green feed one year and in barley or wheat to pasture or hog off the next.

Gleaning Stubble Fields.

If the farm is fenced hog tight, the hogs have the run of the stubble field from the time the grain is harvested until the land is plowed the following spring. The volunteer grain makes the earliest green feed in the spring.

Whether or not wheat and peas shall be used from the time they are available in the early summer until the autumn rains have softened the barley sufficiently to be hogged down will depend upon the number of hogs kept on the farm. Where only enough hogs are kept to glean the stubble field, peas and wheat are used only until the grain is thrashed and the stubble field is open. Where more than enough hogs are kept to clean up the stubble field, wheat and peas can be profitably hogged off until the barley is in condition to use.

Somewhat limited observations indicate that field peas in the dry parts of the wheat belt seldom have nodules on their roots. The yield also is usually light. The lack of nodules, the light yields, and the high price of seed make the production of peas questionable. It is probable that they may be grown profitably in rows as a cultivated crop. At the experimental farm at Moro, Oregon, peas are planted in double rows 7 inches apart with 35-inch spaces between the double rows. The peas are planted in this way with a grain drill by stopping up a part of the feed cups. The peas support each other and stand up better when planted in this way. They then receive shallow cultivation between the rows until the vines lay over.

The feeds that may be used economically to carry hogs through the winter are standing barley and headed wheat. Field peas may also be stacked and fed without thrashing.

Crops for the Irrigated Valleys.

Much of the irrigated land along the Columbia River, on the one ex-

treme, is less than 40 feet above the level of the sea. Some of the irrigated mountain valleys, on the other hand, have an elevation of 3,500 to 4,000 feet. At the low altitudes pasture is available much earlier in the spring and later in the autumn than at the higher altitudes. In the mountain valleys all of the grain fed is raised, while in the lower districts most of the grain consumed is purchased from the nearby wheat farms. In the lower districts corn is successfully grown. In the higher valleys corn has not proved a success.

Pasture Crops.

Alfalfa is most generally used for hog pasture under irrigation. There are many who prefer clover, however, especially in the mountain valleys, because it starts growth earlier in spring and is less injured by fall frost than alfalfa. The two crops are sometimes grown together. It is claimed that a mixture of the two will carry nearly one-third more hogs per acre than either grown alone.



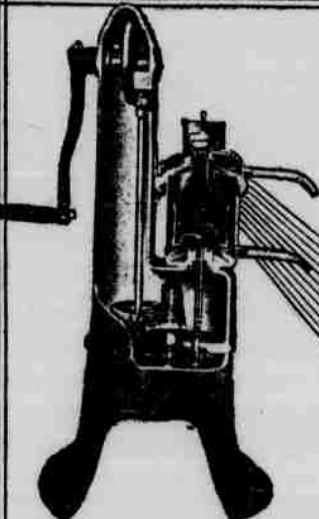
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