

## LEGUMES FOR ARIZONA

By Fred Stromquist

With the reclamation of wide areas of arid land in Arizona by irrigation legume crops are attracting more and more attention from farmers and fruit growers. This is quite natural, because once sufficient water is available legume crops play an important role in building up and maintaining the fertility of the soil.

The severe summer heat in Arizona tends to oxidize or burn out humus in the soil. Unless this humus is being constantly put back into the soil the loss will make itself known in poorer and poorer crop yields.

Aside from supplying organic matter and nitrogen through root nodule fixation, the legumes furnish an abundant supply of forage which is very valuable in a state where cattle growing is the outstanding industry today. A long growing season makes it possible to get big yields of alfalfa. This probably accounts for the fact that one third of the cultivated land in Arizona is in alfalfa and that alfalfa has been grown commercially for 40 years.

In a survey of the best legume crops for Arizona we find that alfalfa ranks first in importance for forage purposes. On the other hand, teppary beans are the outstanding legume crop for green manure purposes. Biennial sweet clover and annual "sour clover" rank among the leaders for green manure purposes, particularly

because of the big tonnage they produce.

Field peas are another legume which are important in Arizona agriculture. Austrian winter peas are being tried out at present and hold out possibilities for a winter legume. Cowpeas do well in the State as a summer crop. On the experimental plots of the University of Arizona cowpeas have shown good results, producing a heavy foliage. The popular variety is Whip-poor-will.

The vetches hold out hope for a winter green manure crop. Vetch grows well in Arizona. Soybeans are relatively unimportant. Experiments at Mesa have shown that the seed is inferior, because of the dry atmosphere. Very little clover is grown in the irrigated valleys of the State. In the higher altitudes, however, clover does very well. On the whole the clovers are not important as a legume crop in Arizona.

With cotton again in the limelight, many Arizona farmers are on the lookout for a legume crop which can be planted in the fall after the cotton is gathered and which will make enough growth to plow under for green manure in the early spring before another crop of cotton is planted. It is doubtful if such a legume will be found. Canada field peas, Colorado stock peas and chic peas and vetches hold out some possibilities along this line, but they do not make enough

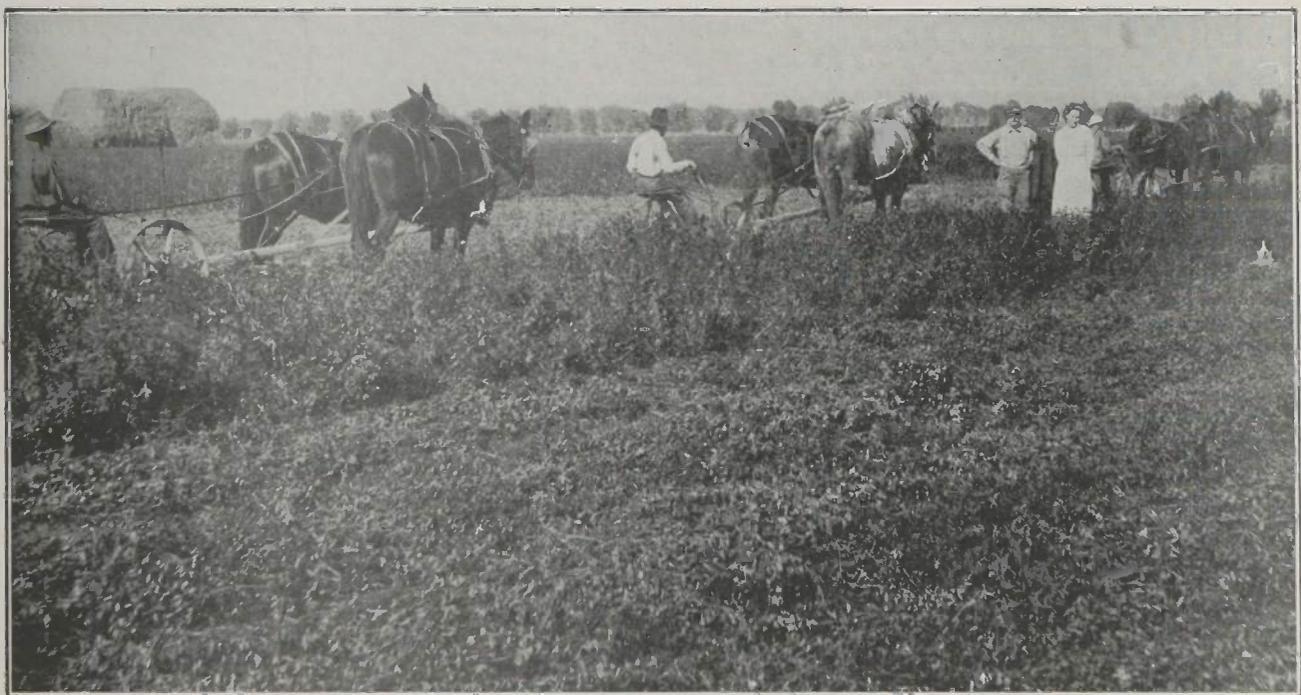
growth to be of any great value. This is true at least with the present known varieties.

In 1917 there were 185,000 acres of alfalfa in Arizona. The long growing season permits of as many as six cuttings and it is not uncommon to get as high as six tons to the acre where the soil is fertile. Variety plays a big part in yields. Hairy Peruvian is a rapid grower and produces big yields. It starts growth early in the spring and likes cool weather. It recovers quicker after cutting. Because of its coarseness it should be planted thicker than the common variety.

While Hairy Peruvian is excellent for Arizona conditions, common alfalfa is grown more extensively. Of a total of 185,000 acres in alfalfa only 33,000 were in Hairy Peruvian. No doubt the Hairy Peruvian will be the leading variety in the future.

The teppary bean, leading legume crop for green manure, is native to southern Arizona. The seed is very cheap when compared to other legumes and it also makes a very good vegetative growth. Then too, it is hardy to hot weather and has an ideal seeding habit. It is widely grown and considered an old stand-by.

The high cost of seed prevents the growing of an extensive acreage of vetch in the State. At Yuma seed cost 18 cents a pound in 1923. With  
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Cutting Alfalfa Christmas Week in the Salt River Valley.

## HOW MUCH TIME DO YOU WASTE WASHING DISHES?

By Helen Mahoney

In the practice house at 922 East First Street, a laboratory course for the Home Management in Home Economics is conducted.

The house is owned by the University and used for experimentation and putting into practice the rules learned in other Home Economic courses in order to put the Science of Home Management where it rightfully belongs.

There are many factors to be taken into account in tracing the evolution of Home Management; many factors that at first glance would seem to the uninitiated to be so small as to be unimportant. Taken in its entirety the Science of Home Management is nothing more than the utilization of every facility to secure a maximum efficiency at a minimum expense.

Did you know that the average girl marries at the age of 23 and washes dishes until she is 60 years old? She spends 30 minutes three times a day, or 547½ hours a year, or 20,257 hours for the 37 years, or more than enough time to put herself thru college, and yet statistics show that 9-10 of the women wash dishes wrong. Almost every woman washes dishes lefthanded. She has to for in most houses the drain boards are placed on the left. That is because women have

not demanded that they be placed on the right. A brick layer will not employ a worker who makes an extra motion because it lowers the maximum of efficiency.

The girls in the Home Management course experimented by washing dishes from the left to the right-using boiling water and drain pans and they have saved at least 30 minutes a day, or 182½ hours a year. Isn't it worth trying? Think of the things you could do in that time.

Here we have our problem in a nutshell. It is a problem as old as domestic life itself for it is and has been woman's problem for centuries and woman has been burdened with the yoke. Herodotus writing in 600 B. C. tells of the Athenian housewife bartering with a shop keeper that she might secure a minimum of expense. Socrates complained that "his wife was a nagging creature, so taken up with her duties of neusing that his home life was less than nothing." The Roman matron personally superintended the purchase of foodstuffs that a few sestertia might be saved for a rainy day.

The problem has come down thru the ages unchanged. Ancient and

time worn ideas regarding the position of women have been discarded and in their place adopted a policy so far reaching in its scope and possibility as to be almost without end.

Education has been the solution of the problem. The American housewife has responded to the call for emancipation and a better type of freedom; no longer will she leave her beauty over the washtub, dish pan, or kitchen stove. The "Battle Cry of Freedom" for women has been sounded. Emancipation is at hand.

The Salt Rivey Valley irrigation project outranks the average condition of the other twenty-seven projects in the United States. Government reports show that the Salt River Valley project has paid back 16 per cent of the government money advanced while the average project has paid back only 6.8 per cent.

Arizona lands return greater yield of cotton per acre than any other state, according to government crop reports. Arizona has averaged 311 pounds of lint per acre. North Carolina is second in high yield with an average of 290 pounds of lint.

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from 50 to 60 pounds to the acre it is evident that the cost of seeding an acre is almost prohibitive. The best variety of vetch for Arizona is *Vicia Calcurata*. This variety has a good seeding habit and produces good foliage. Purple and Wooly Podded are two other good varieties. In 1920 in the Salt River Valley Wooly Podded was the best variety. Hairy vetch does well at Yuma.

Both the sweet clover and the "sour" clover are outstanding green manure legumes. The annual "sour" clover grows as high as a man's head and is a fine soil builder. It has proven its worth in several orchards. Biennial sweet clover also grows unusually well, because of the high lime content of the soil, and is an excellent crop to plow under for humus. In the Santa Cruz valley near Tucson farmers have found sweet clover worth while. Indeed, some of them consider it the ideal green manure crop.

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