

Figs for Dairy Cows

**substandard figs in feed give
orchard by-product new value**

Wm. H. Alison

By-products of one branch of agriculture can be utilized to great advantage by another group of farmers.

The production of high quality figs is one of the main enterprises of Merced County farmers, and the problem of making the best possible use of the culls—substandard grades—has been solved by turning them into livestock feed.

With 10,000 acres in bearing fig trees in the county, and a dairy cow population of over 70,000 head, many Merced County dairymen have been using figs as a feed successfully for many years.

One dairyman has been feeding figs to his Jerseys for 25 years with excellent results.

Another dairyman has been feeding a fig mixture for a year to his Holstein herd. He has 95 cows in milk, and his daily butterfat production is 140 pounds.

One feed concern alone is selling about 10 tons of fig concentrate mixture per day, or over 3,600 tons per year.

Food Value

One hundred pounds of figs contain four pounds of digestible protein and 69 pounds of total digestible nutrients.

Average California barley contains 7% digestible protein and 79 pounds total digestible nutrients.

Although figs are low in protein, they have a feeding value of about seven eighths that of barley.

When barley costs the feeder close to \$60 a ton, and cull figs sell at a little over half that figure, it is good business—from the standpoint of economy alone—to include some figs in the dairy ration.

Figs have other points to recommend them. Their high sugar content makes them one of the most palatable of all feeds and by adding them to other grains and mill feeds, concentrate mixtures can be produced that are enjoyed by dairy cows.

About the only limiting factor in the use of figs in a dairy mixture is the fact that figs, like most fruits, are laxative and—if overfed—will cause scouring, especially when the cows are on green feed.

It is best to feed not over four or five pounds of figs daily to each cow.

Heavy feeding of concentrates is not

the general practice in Merced County, and mixtures containing from 20% to 25% figs have proved quite successful with pasture and without pasture.

Use

Figs can be fed whole, but are used to best advantage when ground into a concentrate mixture. They are a heavy, sticky feed, and the development of a thick concentrate requires special handling. There are four important factors:

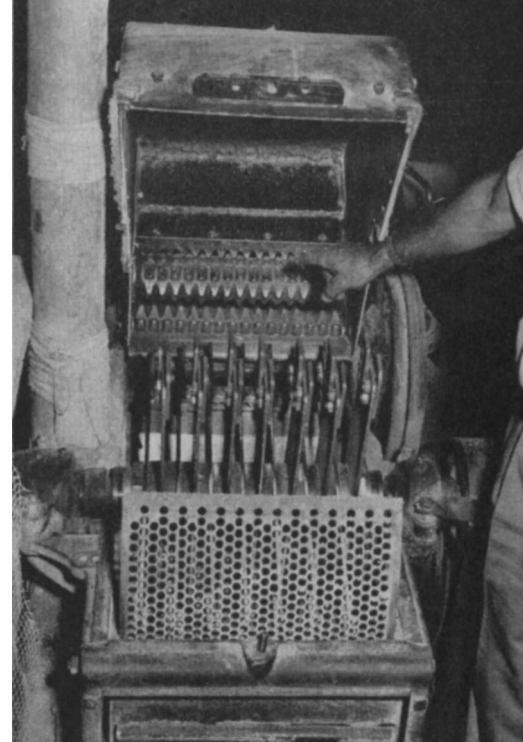
1. The figs should be mixed with an equal weight—at least—of bran or other mill run to avoid clogging the mill screen. A five-eighths inch screen is the size commonly used for grinding the fig mixture in a hammer mill.

2. A cleat-type elevator should be used so the mixing of the figs and other mill feeds will begin as they are carried to the hopper.

3. A governor controlled cut-out should be installed so the feed rolls will stop when there is a possibility of over-loading the mill.

4. An auger conveyor mounted below the screen will push the ground mix into the blower tube.

Two sample mixtures, containing about 12% digestible protein, and suitable for feeding with alfalfa hay, are given here:



Hammer mill showing governor-controlled feed rolls, hammers, and five-eighths inch screen, commonly used for grinding a fig concentrate mix.

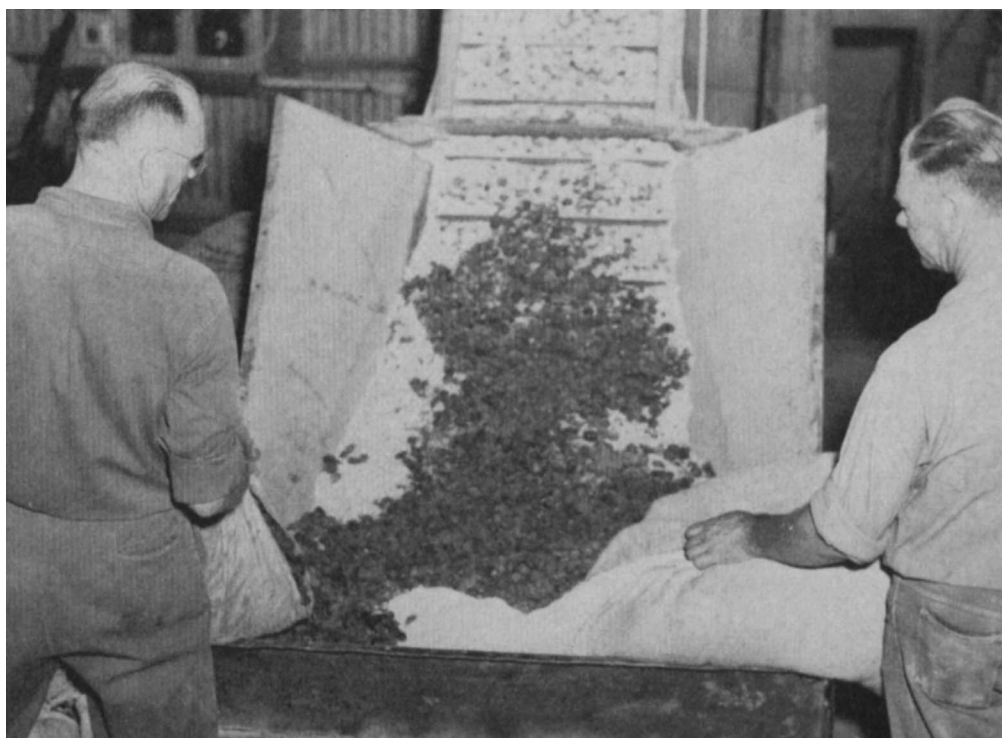
Sample No. 1

Feed	Pounds
Figs	500
Mill run	500
Rolled barley	700
Cottonseed meal	300

Sample No. 2

Feed	Pounds
Figs	500
Rolled barley	450
Rice polish	400
Cottonseed meal	350
Wheat bran	300

Wm. H. Alison is Farm Advisor, Merced County.



Equal parts of figs and mill feeds are mixed as they are conveyed to the mill hopper by a cleat type elevator.