

Oregon Agricultural College is the Friend of the Farmer

Page of News Notes and Interesting Articles Written by College Experts.



Oregon Agricultural College, Corvallis, Oregon, the Sole Aim of Which Is to Aid Agriculturists.

FOOT AND MOUTH DISEASE AND METHODS OF SPREAD

FOOT and mouth disease is one of the most contagious of all the diseases from which animals suffer, says Dr. Shum, veterinarian at the Agricultural College. Cattle, sheep, goats, and hogs are attacked most frequently, but horses, cats, dogs, and humans have been known to develop this trouble. Some investigators have claimed that the fowl is susceptible.

The cause of this disease is not definitely known. Experiments have proven that a porcelain filter which will remove all bacteria from a liquid will allow this germ to pass through. For this reason it is called a filtrable virus.

Practically all of the excretions of an animal affected with foot and mouth disease are infectious. The milk, the saliva, the feces, and the fluid in the blisters contain the virus. The sick animals may contaminate everything with which they come in contact. The virus may be transmitted to other animals by direct contact or indirectly. Cases have been known in which the disease was spread through hay carried from an infected farm, through wool or hides of infected animals, and by people who carried the virus on their shoes or clothing. Hence the quarantine must be very strict to control outbreaks.

From three to six days usually pass between the time of exposure and the appearance of the first symptoms. At the beginning there is fever and loss of appetite. This is usually followed in less than twenty-four hours by the appearance of blisters or vesicles. As soon as the blisters form the temperature drops back to just about normal.

In cattle the mouth is nearly always affected. The animals either eat very slowly or refuse food. The mouth is kept closed and the lips stick together. This causes a smacking sound when the mouth is opened. The blisters form on the inner surface of the cheeks. They vary in size from that of a pea to as large as an egg. After one to three days they rupture and then healing follows rather slowly.

In sheep the mouth is quite frequently not affected and in hogs the mouth is usually free from disease.

Hogs nearly always, and cattle and sheep very frequently develop similar vesicles or blisters on the feet. The most prominent symptom is the lameness which appears as soon as the vesicles begin to form. The animals may lie down the greater part of the time. The blisters are most frequently between the toes and at the base of the dew-claws.

Other parts of the body which may be affected are the udder, the skin around the base of the horns, the muzzle in cattle and sheep and the snout in pigs.

Most cases result in recovery in from two to three weeks from the appearance of the first symptom.

The disease is a very serious one not on account of its high mortality, but because it is very infectious and by attacking so many animals it causes a very considerable loss in milk, in beef, and in pork.

Any suspected cases should be separated from all other animals as soon as the first symptoms appear and either the state veterinarian or the county veterinarian should be notified at once.

GOOD CULTURAL METHODS USE HALF THE RAINFALL

MAXIMUM production in the Oregon dry farming areas is dependent primarily upon the fullest possible utilization of precipitation according to investigations conducted by H. D. Seudder, agronomist of the Oregon Station. Tillage operations were developed in these investigations whereby fully one-half of the total annual precipitation was conserved for crop use. This is a much larger use of the available moisture than is now generally obtained, the average farm probably utilizing for crop production not more than one-fourth of the total precipitation.

Among the cultural practices which conserve moisture to the extent indicated are deep plowing, fall plowing and fall disking; or spring disking, spring plowing, harrowing, and sub-surface packing. Methods of sowing must also conform to the special requirements of each case, broadcasting being considered as entirely out of place on the dry farm where the practice has largely been discarded. Pressdrilling is employed where soil is loose and somewhat dry and where shallow seeding must be done. Rolling is occasionally practiced on the dry farm, to break an extra heavy crust formed on winter wheat, or to form an overloose soil in which the wheat is sowed.

Deep plowing is the first essential in moisture conservation. By this practice much of the rainfall that is ordinarily lost through surface runoff or evaporation is stored in the deep soil for crop use during the succeeding season. "A furrow less than nine or ten inches deep cannot be considered deep plowing." Spring plowing may be somewhat shallower and a slight variation in depth each year is practical to prevent formation of plow holes.

Fall plowing is the second step. This leaves the land rough and loose practice much of the rainfall that is holds the snow and absorbs the rainfall for later use. The fall plowed fields should not be harrowed in the fall but left rough and uneven.

If time cannot be taken for fall plowing the land should be disk harrowed after harvest. With the ordinary disk harrow double disking should always be done by lapping half the first round, never by disking crosswise.

Where spring plowing must be done as is true in much of the dry farming land of Eastern Oregon, it should be done as early as possible to save the moisture. The spring plowing should be followed immediately by harrowing. Rapid evaporation starts in April so that when a deep furrowed slice of moist soil is exposed to the sun and wind the loss of moisture is very rapid, unless stopped by a mulch created with a harrow.

BIG PROBLEMS UP.

OREGON'S biggest agricultural problems will be up for consideration at the Agricultural College conference during Farmer's Week, Feb. 1-6. They will be handled by the most successful leaders of Oregon's agricultural interests, by experts from the United States Department of Agriculture, and by specialists from the leading agricultural colleges of the country. Farmers are invited to bring their most important problems for solution.

GREAT OPPORTUNITIES FOR OREGON HORSEMEN

"PURE-BRED horse breeders of Oregon are to have their chance," says Carl N. Kennedy, horse specialist at the Agricultural College. "The effect of the European war upon the importation of horses is bound to increase the demand for the home produced material. This demand will give the Oregon breeders a chance to demonstrate to stallion owners that the home bred animal is just as good breeding stuff as that from foreign countries.

"The outlook for pure-bred horses has never been brighter than it is at the present time. But with the great opening for pure-bred horses in this state the pure-bred breeders should use discrimination in selecting their stallions, castrating as colts those that lack any of the essential qualities. It is more than likely that with increased demand there will be a tendency to sell anything that is purebred, but this should be discouraged.

"Everything that can be done to encourage the breeding of pure bred to take the place of the grade and the mongrel is being done by the Agricultural College. It is the belief of the Animal Husbandry people that nothing can be done to improve Oregon horses more quickly and surely than to use sound, pure-bred horses for breeding. There is no reason why Oregon breeders should not furnish this material."

FARMERS' WEEK FEB. 1-6.

FARMERS' Week exercises have been scheduled for February 1 to 6, 1915, and placed in charge of the Extension division. The character of the exercises, modified to suit the changing conditions, will be largely that of congresses, conferences and conventions of representatives of the leading agricultural industries of the state. Among the conventions already announced are those of the Jersey, the Holstein and the Ayrshire Breeders' Associations, and it is expected that an organization of the Guernsey breeders will be affected at that time. The State Dairymen's Association will meet at the College during the week. A conference of county agricultural agents from the eleven Oregon counties maintaining the work will be a highly important feature. Leading representatives of the various rural interests, social as well as industrial and commercial, will be in attendance from Oregon, from other states and from the United States Department of Agriculture.

PURPOSE AND METHODS OF FINISHING SURFACE

ALTHOUGH stains, fillers, varnishes, shellacs and waxes may be prepared by the finishers, they are all put up by concerns handling them and it is usually best use. Oil stains and spirit stains are for beginners to buy them ready to both used, writes H. C. Brandon, O. A. C. manual arts specialist, "the latter being very penetrating. Oil stains are made by mixing the pigments, such as umber, sienna and others well known, in turpentine or benzine. The desired tone is secured by combining properly two or more of the pigments."

Stains are used to change the color of the wood and to improve its grain and texture. The purpose of the filling is to give a perfectly level surface for the varnish or other finish. It should be used on all porous wood after staining. Varnish is a resin dissolved in turpentine, benzine, etc. After being applied to the surface the spirits dry out leaving a thin coat of resin. Shellac is dissolved in grain alcohol and applied with a brush. After drying, the work is free from dust. Wax (beeswax and other ingredients) is dissolved in turpentine and applied as a polish.

O. A. C. HORT SHOW.

OREGON fruit, vegetable and flower growers were given an opportunity to see an exhibit in each of these lines designed and built up by experts, at the Agricultural College Hort. Show on the first Saturday in November. The exhibits were educational in their nature, and included mostly varieties of the medium, commercial types, most profitable for home and market purposes. Indeed the abnormally large types were grouped into separate exhibits as "horrible examples" of what not to grow and display, and were plainly termed monstrosities. Cultural methods and marketing methods, including parcels post shipments, were demonstrated for the benefit of producers and consumers alike. The Hort Show was so successful that it will be continued as a part of the work of the division of Horticulture.

SOLVING PEST PROBLEMS.

INVESTIGATIONS of damage to strawberry vines in Oregon are being conducted by the Agricultural College Entomological department with a view to more effective control of the insect causing the damage. Extensive material collected in Eastern Oregon, and other parts of the state is being made the subject of experiments by G. L. Monette of the Experiment Station staff.

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