

## FEVER CONTROL AIDS EXPLAINED

**Eradication Of House Fly  
Is First Step To Stop  
Typhoid**

**HOW MALARIA BEGINS**

**Specie Of Mosquito Is Sole  
Cause Of Dread  
Disease**

One most active agency in transmitting typhoid defies the detective but its activity in this is beyond a shadow of doubt, that is the house fly. This is the most direct of all the agencies and without doubt the most common one in the country. Most of the unaccountable cases are the work of this most prevalent human pest, the house fly. So well is this known that some writers are now calling it the typhoid fly. No great effort of the imagination is needed to make a case against the fly. For instance, the excrement of a sick person or the spit of a consumptive is left uncovered on the premises, the dining room window is open, a saucer of cold pudding is on the table. Do not turn from the thought in disgust but rather ponder over it well. You may conclude to screen that dining room window and also to cover or disinfect the excrement and to burn the spit of the consumptive.

A fly wading into excrement will carry on its feet thousands of bacteria and with these it can poison milk, water and food, by simply walking over or into it.

Why fear snakes, centipedes, or tarantulas about our camp when we have flies? Poisonings and deaths caused by flies are thousands of times more than are due to all other poisonous creatures.

These facts are established. Then what are we to do about it? One thing we can do effectively always. That is, screen against the fly. This is necessary and a duty for health's sake, and it is fully worth while to screen to get rid of the simple nuisance of the flies even if health did not require it.

There are many kinds and qualities of screens. The owner can choose to suit his purpose and purse. In any case it is vastly cheaper than doctor bills beside the comfort secured. Screen your house against the fly and then murder every fly that slips in. It may seem trivial to give space here to directions for making "fly swatters." It is simple, easy, and like play, but the reader is advised to take this whole subject seriously.

### Fly Swatters

Shear out pieces of wire fly screen about 4x5 inches; fasten these to the end of a light stiff switch or splinter about 18 inches long. The fastening to the switch can best be made by strapping on with light wire.

Every home should have one in every room and the children should be encouraged to use them and taught

foods for vitamin D which is now known to be necessary in building strong, straight bones, sound teeth and to prevent rickets in children. Formerly it was thought wise to substitute other less expensive foods for eggs in winter when they are high. This is a mistake, says Miss Thomas. Eggs contain such vital food elements that every effort should be made to include them in the diet at all times. Particularly is this true of small children. She recommends that the baby's diet include some egg yolk each day and that the child two years old and older have at least one egg each day.

Eggs are easily and quickly digested if cooked so the protein is not toughened or coated with grease. To cook eggs well they must be cooked at a low temperature, that is, below the boiling point of water, and cook them for as short a time as possible, advises Miss Thomas.

## LETTERS

**TO SECURE BINDER TWINE**

Salisbury, N. C., April 28, 1930.

Dear Sir:

If interested in binder twine please make your order up and send it to me as soon as possible. The price will be about \$5.70 per bale on International or some other good grade of twine. McCormick-Deering will cost 25c per bale more. The above price is F. O. B. Salisbury, N. C.

It would be better for the Granges in each county to get their orders together and have small orders shipped to one address. All twine will be shipped bill of lading attached.

Hoping that each Grange will take advantage of this, I am

Yours for service,  
S. H. GOODMAN,  
Business Agent.

Editorial Note: This is one of the methods by which the Grange assists its members. Members will find it advantageous to make use of such suggestions.

why.

One other remedy against poisoning by flies is to leave nothing poisonous where they can get to it. Filth they will find but all filth is not positively poison. To illustrate: If there is a patient with typhoid at the home, the excrement should be buried deep in dry earth or sterilized according to a doctor's direction. It is a crime to do otherwise. In an isolated home one can protect his family effectively but where several families live near to each other the negligence of one will endanger the whole community, which fact is one illustration of the need of cooperation for public welfare in any community.

It is quite possible to get rid of the danger and nuisance of house flies by preventing their breeding. The possible, public opinion is not sufficiently developed at this date (1929) to enforce regulations and cooperation that would practically suppress this fly and others like him.

Already some of the more progressive communities are cooperating against the fly with encouraging results. The day is not distant when barns and cow stalls will be screened and also the manure pit, for it is there that the fly breeds chiefly. One encouraging point about such a proposition is that every step to stop the breeding of flies is a step toward cleanliness and toward comfort as well as towards health of both man and his animals.

### Malaria Fever

As well informed and thoughtful people are now obliged to associate typhoid fever and the housefly, even more so must we associate malarial fever with the mosquito.

No discovery in recent years in the field of health is more wonderful nor fraught with more far reaching results than that malarial fever and yellow fever are caused by the bite of a certain kind of mosquito and by nothing else. Not many years ago the idea was prevalent that malaria was due to bad air (malaria means bad air) or bad water or both, and that yellow fever was contagious like measles. At that time any story in Arabian Nights would have seemed as plausible as that these diseases

## SPRAY MIXTURE AIDS POTATOES

**Bordeaux Compound Kills  
Flea Beetles, Bugs And  
Blights**

**POISON DUST USEFUL**

**Materials Very Satisfactory  
If Applied Early And  
Frequently**

(By H. R. Niswonger, Extension  
Horticulturist)

Spraying Irish potatoes is absolutely necessary in order to secure the largest net returns from this crop. The vines must be kept green and vigorous until the tubers are fully matured. The common pests that reduce the vigor of the vines are the flea beetle, potato bugs, early and late blight. One combination of spray mixtures will hold these pests in check. This combination is home made poisoned bordeaux mixture or commercial poisoned bordeaux dusts and poisoned copper dusts.

Bordeaux mixture is used as a spray and consists of 50 gallons of water, 3 pounds of blue stone or copper

were caused by the bite of certain kinds of mosquitoes, but science has traced it out. The facts are established beyond doubt. It is a long and interesting story, but space does not permit us to insert it here, however interesting. It is due to this discovery that Havana, Cuba, and the Panama zone are now free of yellow fever, the neither place was ever known to be free of it until the United States authorities enforced regulations that practically exterminated the mosquito and thereby completely eliminated yellow fever, and just as surely we can eliminate malarial fever if we eliminate the mosquito or prevent it biting.

So here we find another argument for screening our homes. As in the case against the house fly we have the double incentive; first, health; second, comfort; and note that when we screen against one of the pests we bar both.

There are a number of kinds of mosquitoes, but all do not cause malaria. The one known to be most active in this respect is known as the anopheles. He is a big fellow with white spots on his wings and stripes around his legs and who sticks two legs up behind when he drives in his bill. Everybody in the Southern states knows him.

It should be further explained that these mosquitoes are not poisonous until they have bitten a person sick with malaria or yellow fever. But who can tell whether any one of the insects is carrying the poison or not? And who is going to examine each one that comes singing round to see whether it is an anopheles or not? The thing to do is to bar them all, and to try to destroy them all or rather prevent their breeding.

### Breeding Place

They breed only in still stagnant water that has no other life that preys on the mosquito eggs and larva. The eggs are laid in little black clusters looking like minute black honeycomb. These hatch and enter the water as "wiggles tails." If nothing eats them they soon come out as mosquitoes ready for mischief.

To prevent their breeding is simple in the statement but difficult to carry out thoroughly, everywhere and at all times. First, drain every place where they can hatch and the water is not wanted. This includes not alone the open ponds and puddles but tubs, barrels, tin cans, jugs, and the like. Second, where the water in vessels is needed as in barrels and cisterns screen the openings so that mosquitoes can neither get in or out. Third, in larger bodies of water, put in some fish that will eat the eggs and larva. For this purpose the sun fish or common perch is effective. Fourth, in case none of the foregoing is feasible a little kerosene oil thrown on the water will spread over the surface and suffocate the larva.

Fortunately, mosquitoes do not voluntarily travel far; hence one need not cover a large area in order to reduce the pest to practically nothing locally.

## DOGWOOD BEAUTIFUL; IS VALUABLE AS CROP

**AUCTION OF BEEF  
SIRES TO BE HELD  
AT CLYDE, MAY 23**

Macon county farmers desiring to purchase young Shorthorn and Hereford beef bulls for breeding purposes are planning to attend an auction of bulls of this stock at Clyde on May 23. These bulls come from a desirable lineage, reports County Agent F. S. Sloan. Mr. Sloan can furnish further information concerning the sale to those who desire complete details. Patton and Davis of Franklin will

sulphate, 4 pounds of a high grade hydrated lime (plasters finishing lime) and 2 pounds of arsenate of lead made as follows:

Dissolves 3 pounds of blue stone in hot water in an earthen or wooden container. Mix the 4 pounds of lime and 2 pounds arsenate of lead to a thin paste each in a separate container. Fill the 50 gallon spray barrel 3/4 full of water. Add the lime paste and stir thoroughly; then add the blue stone water agitating the lime water thoroughly while adding the former. Fill the barrel full of water and then add the arsenate of lead. Apply at once to the potato vines. A stock solution of blue stone may be made by suspending, let's say, 10 pounds in a gunny sack in 10 gallons of water until dissolved. One gallon of this stock solution will equal one pound of blue stone. There is a powdered blue stone on the market that will dissolve instantly. See your county agent as to where to secure this product.

### Poisoned Bordeaux Dusts

These materials are very satisfactory if properly applied and can be secured from any dealer handling spray materials. A good dust gun is necessary to apply these compounds.

Whenever the water supply is available it is more satisfactory to spray. When the potato patch is considerable distance away from the water supply, it may be more economical to dust, especially if water must be hauled up hill. Many of our potato growers have found by experience that spraying is cheaper and better coverage of vines with the materials can be made. Spraying or dusting should commence when the plants are three inches high and repeat every ten days until vines begin to die. This will usually require at least six sprayings. Remember you must keep every leaf green. Flea beetles work on the under side of the leaves and do their damage early. An angular nozzle will enable you to spray or dust the underside as well as upper side of the leaves. Late blight appears from 1st to 10th of July. Keep the vines covered especially during and following this period. Each spraying of an acre of potatoes will require 75 to 125 gallons of water or 15 to 25 pounds of dust. Do the job thoroughly.

It pays to spray or dust potatoes. Experiments at the Mountain Experi-

## SHUTTLE TRADE USES PRODUCTS

**Tree Is Prolific Producer,  
And Grows As Forest  
Understory**

**NEW CROP EACH YEAR**

**Reproduces From Sprouts  
And Suckers After Cut-  
tings Are Made**

The dogwood tree adding so greatly to the beauty of North Carolina forests may be harvested as a crop without destroying the beauty of the landscape.

This is the opinion of R. W. Graeber, extension forester at State College, who was recently requested by an official of the State Federation of Women's clubs to aid in the movement to prevent the destruction of dogwood trees. This official expressed great concern because of the dogwood tree being used for commercial manufacturing purposes.

"Dogwood in bloom presents a beautiful scene," says Mr. Graeber. "So does a field of golden grain; but, we do not ask the farmer to refrain from harvesting his wheat crop. A new crop will take its place next season. The same thing applies to dogwood. It is a commercial necessity, supplying wood from which shuttles are made for use in weaving cotton, silk or rayon. No practical substitute for this wood has been found, but since trees less than five inches in diameter are not merchantable, the owner leaves his younger and more vigorous trees for future crops."

This means that there will be left plenty of dogwood to add beauty to our forests in the future. The tree seeds freely and reproduces from sprouts and suckers. When one tree is cut, several take its place. In the management plan advocated throughout the State by Mr. Graeber, dogwood is left protected as an understory beneath forests of pine, oak, hickory and other larger trees. It is shallow rooted and does not interfere with the growth of the deeper rooted trees.

Mr. Graeber says that dogwood grows on 87 different soil types in North Carolina but only on a few does it produce wood of commercial quality. In such areas it is protected by the landowners.

ment Station during four years of spraying tests gave an increased yield of 35 bushels per acre over the unsprayed plots with three sprayings. Four sprayings gave an increased yield of 51 bushels over the unsprayed plots. The average cost per acre with four sprayings was \$7.67.

## Reorganizes Farm To Make Use For Modern Machinery

One tractor, two mules and three men now do the same work formerly accomplished by eight mules with eight men on a Camden county farm belonging to G. G. Markham of Elizabeth City.

"Mr. Markham has a 400-acre farm typical of those usually found in the northeastern section of the State," says A. T. Holman, agricultural engineer at State College. "A few years ago he grew cotton and corn with some livestock as did the other men about him. Within the last few years, however, the farm has been completely changed. Large areas of cleared and cutover lands have been developed into pasture, which Mr. Markham says gives the biggest return of any part of the farm. The pasture land is ditched, fenced and kept free of coarse growth. The planting system has been changed from cotton to hay, soybeans, corn and sunflowers."

Mr. Holman says that six mules

have been replaced by one general purpose tractor. Now this one tractor, two mules and three men do the same work formerly done by eight men and eight mules. The tractor is used for plowing, discing, listing, planting and cultivating as well as harvesting.

While the new plan has not been followed long enough to determine its advantages over the old, Mr. Markham says it cannot be less profitable. He has secured little or no profit in cotton growing for some years. Now he finds his crops of hay, soybeans, corn and sunflowers to be easily marketed. Many of the products are turned into cash through the livestock route. Cattle and sheep cost very little to feed as they are carried on pasture throughout the summer and use much of the roughage and other by-products in winter. The soil is growing more fertile instead of poorer and Mr. Markham appears to be satisfied with his reorganization, says Mr. Holman.

## Eggs Aid To Better Health According To Food Experts