Recent rural radio talks

C. R. Toop
P. N. Forte
C.F. H. Jenkins
A. R. Tomlinson

Follow this and additional works at: https://researchlibrary.agric.wa.gov.au/journal_agriculture3

Recommended Citation

This article is brought to you for free and open access by Research Library. It has been accepted for inclusion in Journal of the Department of Agriculture, Western Australia, Series 3 by an authorized administrator of Research Library. For more information, please contact jennifer.heathcote@agric.wa.gov.au, sandra.papenfus@agric.wa.gov.au, paul.orange@dpird.wa.gov.au.
SOME RECENT RURAL RADIO TALKS
FROM SCRIPTS MADE AVAILABLE BY COURTESY OF THE AUSTRALIAN BROADCASTING COMMISSION

PARATYPHOID IN SHEEP
By C. R. TOOP, B.V.Sc., Chief Veterinary Surgeon

UNTIL quite recently, paratyphoid had not been diagnosed in sheep in Western Australia, other than in imported Eastern States rams which had developed the disease as a sequel to the conditions to which they had been exposed in transit.

During the past three summers, however, a number of outbreaks have been reported in flock sheep in the agricultural areas and in some of these the losses have been serious. Earlier outbreaks may of course have occurred but because the symptoms are in some respects similar it is possible that the disease was mistaken for enterotoxaemia.

Three mortalities with symptoms of lethargy and scouring were reported from the Geraldton district in January and a diagnosis of paratyphoid was established by the bacteriological examination of specimens forwarded to the Departments Animal Health and Nutrition Laboratory at Perth.

Paratyphoid is caused by microbes of the salmonella group, about 180 species of which are known to exist, and animals become affected by the disease from the consumption of food or water contaminated by these organisms. It is a very common and serious disease of pigs and it also affects sheep, cattle, horses, ducks and poultry.

Affected sheep show symptoms of fever and rapid respiration. They become dull and listless and cease to feed and spend much of their time lying down. When standing the back is arched and the feet are drawn up under the body and there is evidence of abdominal pain. Scouring accompanied by the passage of foul-smelling liquid droppings is a prominent feature of the disease. Many affected sheep die within 24 hours of the onset of symptoms but some may linger for several days and those less severely affected may recover.

At post-mortem examination, inflammatory changes denoted by reddening of the lining membrane will usually be found in the stomach and intestines, and the associated lymph nodes are swollen and congested.

There are no vaccines available for the immunisation of sheep against paratyphoid and to prevent losses from the disease it is necessary to rely on hygienic precautions and these must be directed against the consumption of contaminated food and water. The flock should be provided with a clean and wholesome water supply, and small stagnant dams and soaks which may have become polluted with manure must at all costs be avoided. Chaff or grain which has been heavily infested with mice should not be used and, where supplementary feeding is practised, the grain should be distributed on clean ground on each occasion.

When an outbreak of paratyphoid is in progress, affected sheep which are passing out the infective organisms in their droppings in enormous numbers should be isolated without delay and the flock trans-
ferred to a fresh paddock. This procedure should be continued so long as fresh cases continue to occur.

Under the hot, dry conditions of summer the infection is able to survive in the soil only for a short period so the control of the disease should not present a difficult problem.

For the treatment of affected sheep the injection of \(33\frac{1}{3}\%\) per cent. sodium sulphamezathine in a dosage of 20 ccs. on the first day followed by 15 ccs., daily for the next four days is recommended. The results, however, are variable and while some animals may recover there will be no response in others.

**MODERN METHODS OF APPLYING INSECTICIDES**

By P. N. FORTE, B.Sc. (Agric.), Senior Entomologist

ALMOST everyone appreciates the fact that the successful control of some insects has been accomplished on a grand scale. They will remember the spectacular control of mosquitoes using DDT during the war, and some would remember its use to control other pests such as lice. However, I think relatively few appreciate the vast areas which have been covered with DDT and other new insecticides such as chlorodane and dieldrin in the campaign against insect pests attacking farm crops and animals.

How has this been accomplished? Firstly, new insecticides have been found which will kill insects at a very small dosage per acre, e.g., dieldrin at 2 oz. to the acre for grasshopper control. Secondly, mechanical distribution of insecticides has been perfected to the stage where this small quantity per acre can be applied to give an efficient cover with a proportionately small amount of carrier.

It is not very long ago that in any spraying operations it was deemed necessary to apply 100 gallons of spray per acre to get a sufficiently effective cover to protect a crop from insect pest attack. Similarly, 30 lb. of dust per acre was considered the requirement for dusting crops. This was quite satisfactory and necessary when insecticides such as arsenate of lead were in use. When new insecticides such as DDT and dieldrin were developed, such a small quantity per acre was required that if it was applied at 30 lb. per acre as a dust it was wasteful. Therefore it was desirable that equipment should be developed to apply smaller quantities of insecticides per acre and still obtain an effective cover. This was most necessary where large areas were to be treated. We can trace then a transition from the knapsack and rotary hand dusters applying 30 lb. of dust per acre to efficient power dusters which,
The LYSAGHT
500 BUSHEL GRAIN SILO
saves you money and worry

Enjoy freedom from
• HIGH BAG COSTS
• RATS AND MICE
• DETERIORATION OF GRAIN IN BAGS

Prefabricated from heavy
gauge galvanized iron.
Rodent and weatherproof.
Simple to erect.
Permanent asset.
Generous depreciation
allowance for taxation.
Steel floor is part of each
500 Bushel Silo Set.
Ready to erect on Earth
Ring or other Base installed
by the Owner.
Write for Data Sheet on
Foundations and Bases.

PRICE £33 EX FREMANTLE STORE

SILO PRICES
EX LYSAGHT’S FREMANTLE STORE
1000 Bushel Silo £144
2000 Bushel Silo £223
2000 Bushel Silo (Squat) £223
3000 Bushel Silo £288
3500 Bushel Silo £317
4500 Bushel Silo £423
8500 Bushel Silo £754

DISTRIBUTED IN WEST AUSTRALIA BY:

Co-operative Wholesale Services Ltd., PERTH
Elder, Smith & Company Ltd. PERTH
McLean Bros. & Rigg Ltd. PERTH
Sandovers PERTH
Westralian Farmers Co-operative Ltd., KATANNING
Katanning Stock & Trading Co. Ltd., KATANNING
Reilly, R. A., & Co. NARROGIN

LYSAGHTS WORKS PTY. LTD., NEWCASTLE
or JOHN LYSAGHT (AUST.) PTY. LTD., in all Capital Cities

Please mention the “Journal of Agriculture, W.A.” when writing to advertisers.
Here is a prospect for a bright future!

... spurs full and buds bursting ... surely you could almost start counting your crop in cases ... your profits, almost in the bank.

But have you taken into account or guarded against all those possibilities an orchardist is ever up against—Red Spider, Bryobia or Clover Mite and all those other countless little bugs that seem intent on your ruination?

These days, a dormant season spray is essential and there's none better than Gargoyle Superior Winter Spray. Tested and proved for your protection, you may spray with every assurance that Superior Winter Spray will prove a real tonic to your trees and rid them of pests. Order now from any Agent or Depot of

VACUUM OIL COMPANY PTY. LTD.

Gargoyle

Superior Winter Spray

Please mention the "Journal of Agriculture, W.A." when writing to advertisers
mounted on motor vehicles, were capable of covering acres per day with an application rate as low as 10 lb. per acre.

It was these power dusters and DDT that solved the climbing cutworm problem which menaced flax and linseed growing in this State during and since the war.

Finally, aircraft were tried and found quite satisfactory for dusting crops.

Aircraft have the added advantage of being able to treat large areas quickly at the right time for pest control without damage to the crop and possibly at a time when ground vehicles could not be used.

However, dusts are generally more wasteful of insecticides than sprays.

The most successful attempt to reduce the volume of spray per acre and still get efficient coverage was the low volume boom spray. With this equipment it is possible to apply as low as five gallons of spray per acre and get an efficient cover. This development was a considerable step forward, and thousands of acres have been treated by this method to control pasture and crop insect pests.

The next and greatest step forward was the successful development of low-flying aircraft to distribute insecticides. Careful tests have shown that an excellent distribution could be obtained with as low as 1 1/2 to 2 gallons per acre. What does this mean to the individual requiring pest control? It means that whereas 10 or 15 years ago it was almost impossible to control insect plagues on a large area, now it can be done efficiently and quickly over thousands of acres.

Similarly, in orchards, spray machines have been developed to give a more effective cover and yet reduce the time of application and the manpower required.

Even in a brief resume of the subject of this talk one cannot leave out mention of the development of methods of applying insecticides for the control of household pests in dwellings.

Everyone is familiar with the atomiser used for dispersing fly sprays, and some of you will remember the influence this mechanical means of application had in popularising the sprays which were so useful in controlling flies, etc., in houses.

An equally revolutionary method of dispersing insecticides for household pest control was developed in the United States of America just before the war, was used by the armed forces during the war, and has recently appeared on the Australian market in an improved form. The insecticide container is known as an aerosol bomb.

In this method the insecticides are dissolved in a solvent under pressure and placed in suitable containers. By releasing a stopper at one end the liquid is released through a small aperture and a fine spray or mist is developed. The solvent evaporates immediately and the small particles of the insecticide are left suspended in the air where they float and gradually settle. It is almost impossible for any flying insect to escape these particles and fail to receive a lethal dose.

With better insecticides than DDT available, these bombs are now available to householders and their efficiency for killing household insects is so remarkable that it needs to be seen to be appreciated.

However, it is up to the individual to see that the correct insecticides are used and thoroughly applied, and when in doubt information can be obtained from the Department of Agriculture.
FRUIT FLY

By C. F. H. JENKINS, M.A., Government Entomologist

Do you like growing fruit for someone else to steal? That may sound rather a silly question and yet it is rather surprising the number of people who take considerable trouble to plant, water and prune fruit trees and then allow another to reap the harvest. This is not consciously permitted, of course. They always hope to pick the fruit and they may even do so. But how often does a luscious pear or a ripe fig turn out to be crawling with maggots? Not a very nice subject. But one which cannot be bypassed on that account, as fruit fly maggots are costing Western Australian fruit growers thousands of pounds annually, and if considered on a Commonwealth basis, the losses may reach millions.

How is it that this serious pest is allowed to decimate our orchards and to imperil the very existence of certain branches of the fruit industry? The pest can certainly be controlled if all the known control measures are conscientiously applied. But fruit is so widely grown that it has so far proved impossible to get everyone to treat their trees with the necessary attention to detail.

Many will think that a talk about fruit fly at the end of autumn is quite out of season. It is popular to regard the fruit fly as a spring and summer pest and to heave a sigh of relief as the baiting material is put away in the autumn. The fruit fly is always with us and must be fought all the year round. The heaviest losses occur in the spring and summer because most of the stone fruits ripen in that period.

Pears, apples and citrus, however, carry the pest through the autumn and winter and, although fly numbers are very low in the cooler months, it is these few survivors which start off the next season’s plagues.

Poison baiting with sodium fluosilicate and sugar is still the recommended control for fruit fly. Many people wonder why the newer insecticides have not been substituted. Tests have shown several of them to be very toxic to the fruit fly but none has proved superior to sodium fluosilicate which has been in use in Western Australia for nearly 20 years.
FRY CANT & CO., Midland Junction

For...

EARLY CLOVER AND OTHER PASTURE SEEDS

Seed Oats
Fertiliser
Farm Hardware

6 GREAT NORTHERN HIGHWAY—MIDLAND JUNCTION
Phone UJ 215

... For...

APEX

BLOOD and BONE and MIXED FERTILISERS

We Buy Oats and Rye

Contact

E. J. FRY PTY. LTD.

3 HOWARD STREET, PERTH——Phone W 3354

Please mention the “Journal of Agriculture, W.A.” when writing to advertisers
DON'T JUST MONKEY WITH YOUR OWN
FEED MIX—MAKE IT SCIENTIFICALLY CORRECT WITH

Clark's
"CHECKER-MIX"
Concentrates

Mixing correct feed is a simple matter now. The addition of new "CHECKER-MIX" concentrates to your own mix of cereals, bran and pollard gives a perfectly balanced poultry feed that's right in step with the latest nutritional discoveries. There's a "CHECKER-MIX" concentrate for every purpose, and a list of formulae in every bag shows you how to make best use of the cereals available . . . Write, call or phone Barrow Linton & Co. for details of these amazing new feeding aids.

BARROW LINTON and CO.
763 Wellington Street, Perth ——— BA 9151

MANUFACTURED BY CLARK KING & COMPANY PTY. LTD., 237 QUEEN STREET, MELBOURNE

Please mention the "Journal of Agriculture, W.A.," when writing to advertisers
The regular picking up and disposal of infested fruits is just as important as chemical baiting and, if these two methods were universally applied, our fruit fly problem would disappear.

Most commercial growers realise the danger of fruit fly attack and carry out regular control measures. Backyard growers and those with week-end cottages are often serious delinquents, however, and as a result of their neglect, many suffer. The adoption of community baiting in certain areas has demonstrated clearly the efficiency of the present control measures. Where regular wholesale baiting has been carried out, a marked improvement in the local fruit fly position has resulted and points the moral that it is the few negligent people who undermine the whole.

Fruit fly research is being intensified in several Australian States due to the gradual spread of the Queensland fruit fly, a species which fortunately is not known in this State. Further work is also being continued on the Mediterranean species which is the local variety and one with a world wide and really infamous reputation.

Fruit fumigation techniques are being developed which will kill the eggs and young maggots before any damage is done and also enable export lines to comply with the quarantine requirements of certain importing countries.

New and more effective baits and perhaps soil treatments will undoubtedly be developed in the future for fruit fly control. But at the present time the universal adoption of old but well-tried methods is the surest way of combating a pest which takes far too heavy a toll of the annual fruit crop.

CURRENT COMMENTS ON VERMIN CONTROL

By A. R. TOMLINSON, Chief Vermin Control Officer

PERHAPS the most interesting recent developments in regard to vermin control are the outbreaks of myxomatosis which were reported earlier in the year. The main series extended over an area at least 60 miles long by 30 miles wide covering sections of the Toodyay, Northam, York and Beverley districts. Within this area small outbreaks occurred before Christmas, and flared up after the February floods.

Reports of outbreaks at many other places have been received including the Peel Inlet west of Pinjarra south of Mandurah, Williams, the Geraldton region, Katanning and Narrogin.

The disease has taken the pattern which had been anticipated and, following the recent rains, further spreads are expected.

Our spreads have not been as spectacular as those in the Eastern States, but there can be little doubt that hundreds of thousands of rabbits have been killed and agricultural production greatly increased.

Many of the outbreaks have originated from the work of the Agriculture Protection Board officers, but Vermin Boards and farmers who have persisted in endeavouring to establish the disease are to be praised for their efforts.

It is not too late to establish the disease and farmers would be well advised to carry out inoculation, particularly where mosquitoes are noticed to be plentiful in paddocks or the bush.

The “1080” rabbit control scheme is attracting much attention. This relatively new poison—“1080”—is being used in a large field trial in the Manjimup area, and has proved very successful. Farmers generally have expressed great satisfaction with the results, and are to be congratulated on the co-operation they have given.

In the scheme, farmers “free feed” with unpoisoned bait for three nights. On the fourth night bait is poisoned with “1080” and distributed by trained Agriculture Protection Board officers. A charge is made for the services of our men and the amount of poison used.
The experience gained to date has indicated that the reasons for the outstanding success may be placed in the following order:

(1) The farmers are doing a praiseworthy job in the “free feeding.”
(2) The work is conducted on a front so that all properties are being treated.
(3) “1080” is more effective than other poisons.

It will be noted that the effectiveness of “1080” is placed last, as without the efficient free feeding and the co-ordinated drive most of the advantage would be lost.

The Public Health Department will not permit “1080” to be used by anyone other than trained Agriculture Protection Board officers, but the Board intends to extend its scheme next season, to as much of the Lower South-West and Lower Great Southern as its organisation can include.

The decision of the Agriculture Protection Board to substitute the supply of free spraying materials for bran bait is of great importance to the grasshopper-infested areas.

Breaking up of the egg-beds is still considered the most effective control measure, and the ploughing subsidy will be continued.

Tests conducted here by the Entomological Branch of the Department of Agriculture and experience elsewhere have indicated that spraying with dieldrin is more effective than bran baiting with benzene hexachloride.

In the new scheme, spray will be distributed free to farmers who have satisfactory low-volume spraying implements. For farmers without the necessary equipment, Agriculture Protection Board units will be available to carry out the spraying at a charge to cover the cost of the units. No charge will be made for the dieldrin.

In this first season it is expected that organisational problems will prevent the operations of the units from being extended to the northern agricultural areas where free baiting material will again be made available. Farmers with suitable spraying equipment in these areas will be able to obtain free dieldrin.
For Pest Control
E605-
'Folidol'
and
Folidust
THE ORIGINAL PARATHION PREPARATIONS
of
Farbenfabriken BAYER A.G.
Leverkusen

Write for Information to...
TROPICAL TRADERS & PATERSONS LTD.
863 Wellington Street, Perth

Please mention the "Journal of Agriculture, W.A.," when writing to advertisers