Some recent radio talks. - Phalaris tuberosa as a pasture grass

F. E. Ryan

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

Recommended Citation
Available at: https://researchlibrary.agric.wa.gov.au/journal_agriculture3/vol7/iss6/19

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.
PHALARIS TUBEROSA AS A PASTURE GRASS

By F. E. RYAN, Agrostologist

A BROAD-LEAFED pasture grass of value in Western Australia is Phalaris tuberosa. It is sometimes known as Toowoomba Canary Grass because the early development of it occurred from plants in a botanical garden in Queensland. Americans refer to this grass as Harding Grass and strains are known to occur freely throughout the Mediterranean region.

In this State some Phalaris stands have been in existence for a considerable period, but generally this valuable grass has been overlooked by most dairyfarmers in the high rainfall regions.

Phalaris is a perennial, i.e., it survives over summer as a root-stock and commences growth during the autumn, producing new leaves from buds at the base of the old leaf-stalks. It is one of the first grasses to commence growth in autumn, sometimes even before the first rains, apparently obtaining moisture from dew and deeper soil zones. Winter and early spring production is good and it makes vigorous growth before sending up seed-heads in the late spring. It will remain green for several weeks after annual plants have died off, and if soil moisture is available will grow during December and even January.

Phalaris is very drought-resistant and once established will survive very dry summers. For this reason it can be sown on hillsides and on sandy soils which tend to be too dry and too hot for perennial ryegrass.

It is also capable of growing in waterlogged conditions and is sometimes sown on flat areas which become inundated for a short time during the winter months.

One of the main reasons for the small area sown to Phalaris is difficulty in establishment. The young seedling plants are weak, and suffer from competition from annual plants, even from subterranean clover in the young stages. For autumn establishment, a good weed-free firm seedbed is necessary, and sowing should be done in early autumn so that the plants will become deep-rooted before the wet, cold winter months. It is usually necessary to prepare beforehand for this, and an autumn or spring sown crop in the previous year will serve this purpose. Seedbed preparation can then be done early.

Some recent trials have shown that Phalaris can be sown in the spring in most districts. The pasture on the paddock can be used for grazing until the beginning of August; plough early in August to destroy weeds before they flower; cultivate and sow with Phalaris during the third or fourth week of August. In later districts September planting may be successful. Phalaris will grow rapidly from spring planting.
The recommended rate of seeding is 2 lb. per acre, and this will provide plenty of plants for filling the pasture. If more are sown they will tend to compete with themselves and the final number of survivors will depend more on soil fertility and climatic conditions than on the seeding rate. Likewise, a very well prepared seedbed is much more important in obtaining a good stand than the seeding rate.

Once established, and after the first year, Phalaris is a very tenacious plant. It can withstand harrowing and grazing without any severe reduction in plant numbers, in fact discing, or even mouldboard ploughing of an old Phalaris stand will thicken up the stand by breaking up roots into several parts and transplanting them.

It responds to applications of fertiliser and direct responses to the application of potash have been noticed on deficient paddocks. A vigorous subterranean clover growth amongst the Phalaris would increase, soil nitrogen which Phalaris needs.

Occasionally disappointing results are obtained, even though sufficient plants have become established. This may be due to the use of inferior seed. South Australian certified Phalaris is recommended and excellent results have been obtained by using this line of seed. A great deal of work has been undertaken in recent years with Phalaris strains and a large number of these are under test. Items which are important are seedling vigour to overcome this early competition and ability to persist and produce under grazing. Two strains which have shown early promise are an American one known as C.P.I. 1305 and Denmark, which was selected locally at Denmark Research Station. Another local selection which appears quite promising was taken at Donnybrook.

From a group of approximately 90 strains which were introduced from various parts of the world, the six best of these have been selected over several years, and these will be tested further under grazing.

There is scope for an expansion of the area sown to Phalaris in the South-West and, with the development of Pasture Improvement Groups, a general increase in pasture-consciousness has arisen amongst our farming community, and the area sown with this valuable grass is now increasing.

---

**Book Review**

**FERTILISERS FOR THE FARM AND GARDEN**

Two outstanding and well known agricultural scientists with wide experience in the technical, and teaching aspects of fertiliser usage have collaborated in the authorship of a book entitled "Fertilisers for the Farm and Garden" which should make interesting and profitable reading for farmers, orchardists, gardeners and scientists.

This book should have an especial appeal to local readers because one of the authors, namely Professor L. J. H. Teakle, Professor of Agriculture at the University of Queensland, played a prominent part in agricultural research in Western Australia and was well known to farmers and in scientific circles here up till 1947 when he left the W.A. Department of Agriculture to take up his present position. Those who know Professor Teakle well, will recognise throughout the book many examples of his ability to provide enlightened technical advice in a form acceptable to the layman. The other co-author is R. A. Boyle, M.Sc., who has had long experience as a technical advisor in the fertiliser trade.

The main aims of the book are to present the case for the scientific use of fertilisers, to show how to improve yields and to indicate methods of improving soil fertility. Fertiliser production is now a major industry. Generally responses to fertiliser in Australia have been spectacular. Consequently there is a demand for enlightened advice on fertiliser usage on the basis of the latest existing information and this book has very successfully attempted to fulfil these requirements.

The subject matter covered includes the development of fertilisers in agricultural practice, soil and plant interrelations, the assessment of fertiliser requirements, types of fertiliser application of fertiliser, fertiliser reaction in the soil, fertiliser experiments in Australia, fertiliser usage in Australia, diagnosing soil deficiencies and fertiliser recommendations for farms and gardens.

Some of the highlights that should appeal to the local man on the land are the constructive comments on the limitations of soil analysis, the wide use made of the results of local experiments to illustrate general principles and the stressing of the practical advisability of maintaining "humus" supplies in gardening if the best results are to be obtained from added mineral fertilisers.—L.T.J.

"Fertilisers for the Farm and Garden" by L. J. H. Teakle and R. A. Boyle. Published by Angus and Robertson in the Agricultural and Livestock Series. Price £3 3s.
FLY BAIT — PARTICULARLY THOSE RESISTANT TO STANDARD FLY SPRAYS!

Geigy DIAZINON Fly Bait is the new organic phosphate insecticide formulated overseas by the originators of D.D.T. as an insecticide, not only to kill all flies but to wipe out those that may have built up a resistance to ordinary fly sprays containing D.D.T., B.H.C., etc. Diazinon Fly Bait is safe, sure and simple!

The convenient shaker-pack distributes Geigy Diazinon Fly Bait lightly where flies congregate. One tablespoonful is sufficient for an area of 800 square feet. For maximum fly-control use Diazinon Fly Bait today.

From Seed Stores and Agserv Dealers.

佯尸]

Barrow Linton PTY. LTD.
763 WELLINGTON STREET, PERTH
THINKING OF FENCING?

Before you buy a drill...

CHECK THESE FEATURES!

• A DUPLEX FIRST
With the new “Button Control” exclusive to Duplex. It’s easy to detach and attach tool to your post drill—“just clip it on!” Another reason why the Duplex MK2 is the best “feature packed” drill on the market.

Then you’ll buy a

DUPLEX MK2

Drills wood, steel or masonry.
Has 2 forward speeds, neutral and reverse.
Weighs only 10 lbs.—reduces operator fatigue.
All moving parts sealed in oil bath.
Drills holes up to 1½ in. diameter.
Can be driven from almost any engine—mobile saws, tractors, land rovers, rotary hoes, etc., etc.
New constant-length flexible driveshaft eliminates easily-broken soldered end joints.

Get the facts about this great post hole borer from your nearest Barrow Linton Agent

West Australian representatives:

BARROW LINTON
PTY. LTD.
763 WELLINGTON STREET, PERTH —— PHONE 21 9151

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