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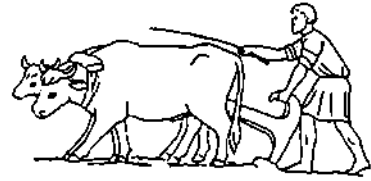
QUEENSLAND

WHEAT RESEARCH

INSTITUTE

A FACILITY PROVIDED BY THE WHEAT GROWERS OF QUEENSLAND

OPENED BY THE MINISTER FOR PRIMARY INDUSTRY THE HON. C. F. ADERMANN, M.H.R., ON 1st SEPTEMBER 1962



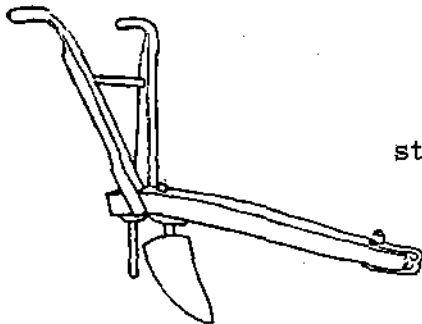
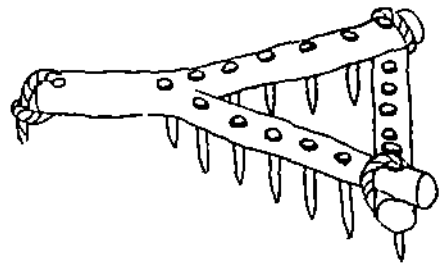
WHEAT RESEARCH

Introduction

The skill and ingenuity of our farmers, technicians and scientists in overcoming the many peculiar production problems of our land has made Australia one of the four major wheat exporting countries of the world.



Our swift progress has been aided over the years by the invention of the wheat stripper and the stump jump plough, the development of the use of superphosphate and fallowing, successful wheat breeding procedures and through the introduction of sub-clover.



However, the wheat industry now stands at a critical stage in its development.

Department of Agriculture and Stock -

Official Opening

Queensland Wheat Research Institute, Toowoomba

1st September, 1962

Chairman - Prof. L.J.H. Teakle, Dean of Agriculture,
University of Queensland.

- 2.00 p.m. Introductory remarks by Chairman.
- 2.05 p.m. Welcome by the Mayor of Toowoomba,
Mr. McCafferty.
- 2.10 p.m. The Hon. O.O. Madsen, M.L.A., Minister for
Agriculture and Forestry, to introduce the
Hon. C.F. Adermann, M.H.R.
- 2.15 p.m. The Hon. C.F. Adermann, M.H.R., Minister for
Primary Industry, to perform opening ceremony.
- 2.30 p.m. Vote of thanks to be moved by the President of the
Queensland Grain Growers' Association.
- 2.35 p.m. Dr. W.A.T. Summerville, Director-General,
Department of Agriculture and Stock.
- 2.40 p.m. End Opening Ceremony.

Afternoon tea will be available from 2.40 p.m. to
3.40 p.m. in the Machinery Shed behind the main building.

The Institute buildings will be open for inspection
until 4.30 p.m. and officers of the Department of Agriculture
and Stock (in white coats with name tags) will be present in the
buildings and grounds to answer questions.

Message from the General President, Queensland Grain Growers' Association

The establishment of Queensland's first Wheat Research Institute marks the beginning of a new chapter so far as our wheat industry is concerned.

While no one can foresee what benefits will emerge from the work to be carried out at the Institute, I am sure that the efforts of our research workers will add to the prosperity of our cereal growing industries.

It is only through science that we can hope to bring about the much desired improvement in our yields of wheat as well as maintaining the quality for which our grains have become noted. Comprehensive research programmes undertaken overseas since the war have resulted in a marked increase in cereal production per acre in most western countries.

Unfortunately this has not been the case, to the same extent, in Queensland.

While it is recognised that conditions in this State are quite different to those existing overseas, it should be possible through more intensive research for the results achieved in other countries to be obtained here. The work done in those countries cannot always be applied here, and the solution of our problems is a challenge to our scientists.

As General President of the Q.G.G.A. I am pleased to be able to say that the great majority of our wheat growers are in favour of the Institute and recognise the value it can be to them.

On behalf of members of the Association I extend to Professor Teakle and other members of the Wheat Industry Research Committee sincere thanks for the devoted service they have given in bringing about the establishment of the new research centre that can mean so much not only to Queensland but to the nation as a whole.

QUEENSLAND WHEAT INDUSTRY RESEARCH COMMITTEE

Professor L. J. H. Teakle (Chairman) Dean of Agriculture, University of Queensland.
Mr. J. C. Eggleston)
Mr. H. T. Merson) Growers' Representatives
Mr. W. Spratt)
Mr. W. J. S. Sloan, Director, Division of Plant Industry, Department of Agriculture
and Stock.
(Until 1961, the Departmental representative was Dr. W. A. T. Summerville,
Director-General of Agriculture).

Technical Advisory Sub-Committee

Mr. W. J. Cartmill (Chairman) Director,)
Agricultural Chemical Laboratory.) Department of Agriculture
Mr. V. J. Wagner, Chief Agronomist.) and Stock.
Mr. T. McKnight, Senior Pathologist.)
Mr. W. E. Fox, Lecturer)
Mr. F. R. From, Research Officer) University of Queensland.

STAFF OF THE QUEENSLAND WHEAT RESEARCH INSTITUTE

Mr. T. McKnight, M.Sc., Senior Pathologist, Officer-in-Charge.
Mr. G. S. Purss, M.Sc. Agr., Research Pathologist.
Mr. J. K. Leslie, B. Agr. Sc., Agrostologist.
Mr. B. A. O'Shea, B. Agr. Sc., Plant Physiologist.
Mr. M. J. Whitehouse, B.Sc., Chemist.

These officers will be assisted by an ancillary staff of eight. All are on the staff of the Department of Agriculture and Stock.

THE QUEENSLAND WHEAT RESEARCH INSTITUTE
TOOWOOMBA

Message from the Chairman

All farmers will readily appreciate the importance of good facilities and equipment, and will support the decision of the Queensland Wheat Industry Research Committee to concentrate its resources on a first-class laboratory and equipment for the improvement of research work in the interests of the wheat industry.

This decision raised a number of problems. Where the Institute should be located and how it should be managed were the most important. I am sure the decision to build it at Toowoomba was correct; I am sure the decision to place the Institute under the management of the Department of Agriculture and Stock, with the Committee deciding general policy, was correct. Another important decision was to open the doors of the Institute to research workers from any organisation, provided they were engaged on work important to the wheat industry and provided facilities were available.

One of the problems of Australia is the organisation of research workers from various institutions into a co-ordinated team concentrating on a programme for the benefit of the industry. This Institute points the way to a solution of this problem in Queensland, and we look forward to a period of happy and productive work in which the State Government, the University and the Commonwealth bodies will co-operate.

It seemed natural that the Institute should be managed by the Department of Agriculture and Stock. Already the Department is active in research and extension work associated with the Wheat Industry, and the urgent need is for laboratories and equipment for the officers concerned. By adding Wheat Research funds to those already being spent by the Department of Agriculture and Stock, efficiency will be greatly increased and the research officers enabled to concentrate on their work with the best of modern equipment. It will be an encouragement to the State Government to spend more on wheat research, knowing that the facilities are available for the efficient use of funds. The Institute will also be of assistance to the University and other Institutions in the promotion of research work associated with the Wheat Industry.

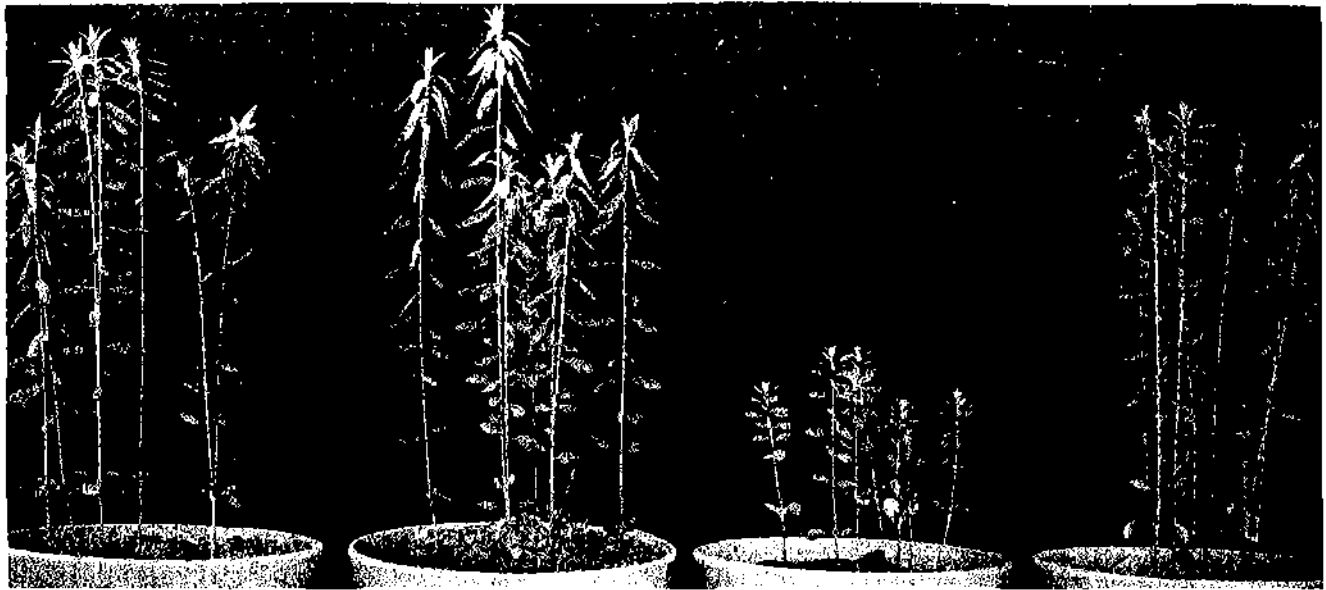
In the management of the Institute, it was agreed that the Department of Agriculture and Stock would appoint an Officer-in-Charge who will be, himself, a full-time research worker on wheat problems. The Committee will not make appointments but will grant funds to institutions or individuals for the carrying out, or expansion, of specific research projects on an agreed basis. The Officer-in-Charge of the Institute, as an officer of the Department of Agriculture and Stock, will carry out the policy of the Committee and will be responsible for the discipline and well-running of the Institute. He will be responsible for the allocation of space and fixed facilities, the use and maintenance of common machinery, and for the maintenance of the property. He will not direct the technical work of the officers at the Institute. This will be the responsibility of the institutions to which the officers are attached.

So that the farmers may be kept informed concerning the work at the Institute, brief quarterly reports, together with a comprehensive Annual Report, will be released to the growers by the Committee.

September, 1962.

L. J. H. Teakle,
Chairman,
Queensland Wheat Industry
Research Committee.

"TODAY'S RESEARCH IS TOMORROW'S PROGRESS"



P-Zn-A+

P+Zn+A+

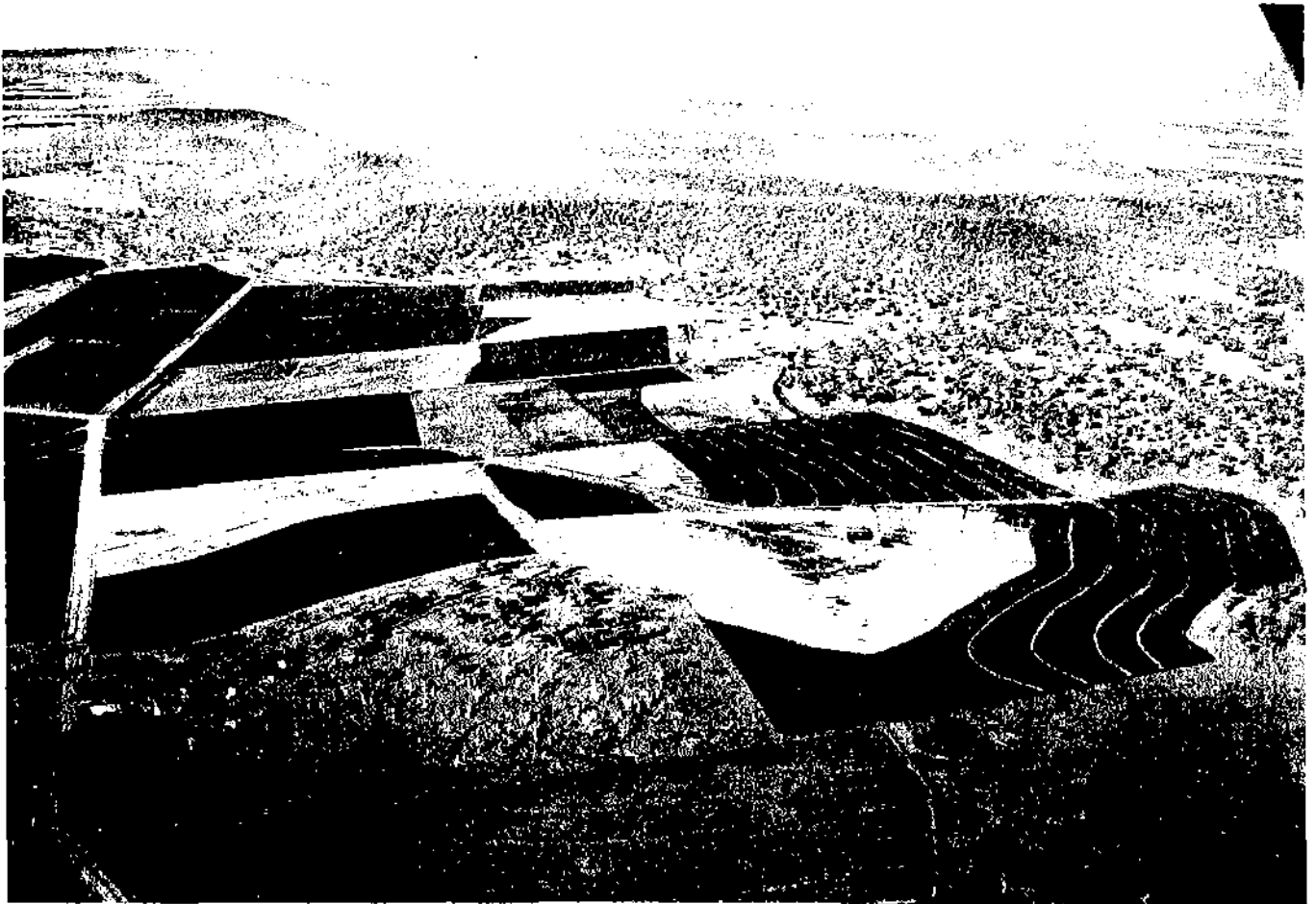
P-Zn-A-

P+Zn+A-



The linseed plant is proving to be the best indicator plant available for the study of nutritional disorders affecting many crops.

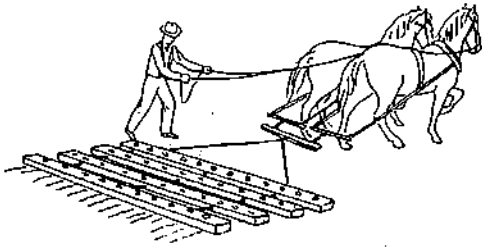
"TODAY'S RESEARCH IS TOMORROW'S PROGRESS"



Contour banks can be productive as well as protective.



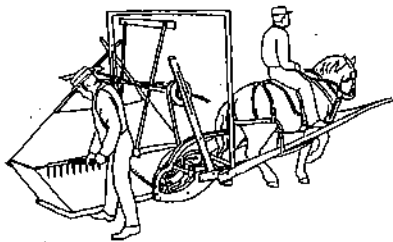
Soil conservation research, planning and construction work has been and always will be of major importance in the protection of soil and soil fertility.



Wheat is Australia's largest agricultural crop, and has always been one of our most important earners of export income - income which must be increased if we are to finance our national development.

We know that there is plenty of scope for the further development of this great industry, with new varieties, bigger yields and better quality wheats. Inevitably, more intensive research and investigation must be made to achieve the industry aims and this has been made possible by the decision of the industry to support additional research into its known problems.

Following on grower activity came Federal legislation enabling this work to go forward.

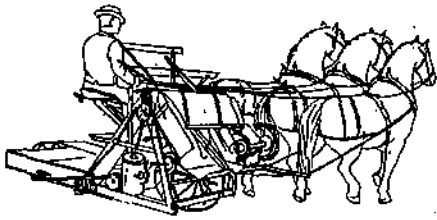


The Wheat Tax Act 1957 has made it possible for this great industry to join with State and Federal Governments in intensifying research into problems of cereal production. For Queensland, the yield from the farthing per bushel tax will yield approximately £10,000, from a ten million bushel crop, which is about one seventh of the present annual expenditure of the Department of Agriculture and Stock on wheat industry research and extension.

This Wheat Tax money of course may only be used to supplement the existing research programmes.

The Wheat Tax revenue, interest and any other contributions to the fund come under the control of the State Wheat Industry Research Committee.

Additional funds are contributed to Australia-wide wheat research by the Commonwealth Government up to a pound for pound rate on the yield of the Wheat Tax. These funds are not distributed on a proportional basis amongst the States, but The State Wheat Industry Research Committee recommends to the Central Wheat Industry Research Council selected projects and the cost involved.



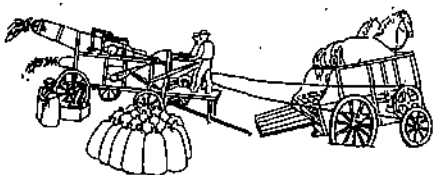
The State Technical Advisory Committee, which had so much to do with the design and location of the Wheat Research Institute at Toowoomba will remain as a permanent committee to plan the type of research to take place at the Institute, and also to handle any general technical matters connected with it. It will obviously provide the Queensland Wheat Industry Research Committee with valuable advice on these matters.

Your committee decided to accumulate its funds for the purpose of erecting a Queensland Wheat Research Institute, with the approval of the Australian Wheat Industry Research Council. The accumulated Wheat Tax Revenue, a generous advance of £40,000 from the State Government and a contribution from the Council have enabled us to complete Stage I of the construction. A great deal of equipment has been purchased and will be installed as soon as practicable. Some is already in use.

When the glasshouse facilities are completed, the Institute's full programme of wheat research will move forward to evolve practical solutions to some of the problems facing wheat growers.

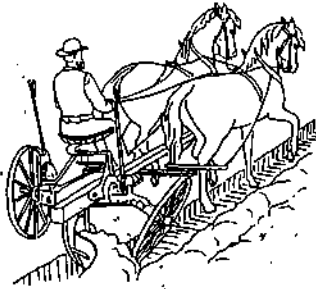
Our chief association will be with the Department of Agriculture and Stock, which is the body charged with the responsibility for technical services to the industry in Queensland. The University of Queensland and other research organisations will be able to use the facilities and will be encouraged to do so.

The Officer-in-Charge of the Institute will be a senior officer of the Department of Agriculture and Stock.



Your Wheat Industry Research Committee will scrutinise all programmes and allocate the funds under its jurisdiction.

These funds may be used for scientific or economic research in connection with or likely to benefit the wheat industry, for the training of persons for purposes of the research referred to for the dissemination of information and advice relating to technical matters in connection with the wheat industry, for the publication of technical reports, periodicals, books and papers or for any other purpose incidental to a purpose referred to above. Graduate students may undertake part of their training at the centre which will also provide a helpful base for some of the University's research programme.



continuing on Research stations and on private farms throughout the grain producing areas.

We are not by any means entering a new field of research activity. Much work has been going on, and is in progress now, to aid the industry. Wheat breeding for disease resistance, improved yields and better baking quality has continued at ever increasing tempo since the days of Farrar. An extensive programme of testing of varieties is a most important adjunct to the activities of the plant breeder, and this work is

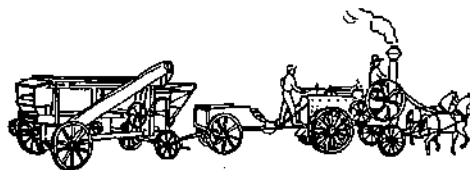
Studies on aspects of wheat diseases have been in progress for many years. The problems of dealing with insect pests have been studied. Technical developments of an engineering nature relating to power units, cultivation, harvesting, bulk handling, transportation, milling and baking have all benefited the industry.

Studies on soils in relation to nitrogen deficiencies, compaction, reduction in yield, rotations, fertilizers and nitrogen fixation are continuing to add their contributions to the total knowledge we have about crop production.

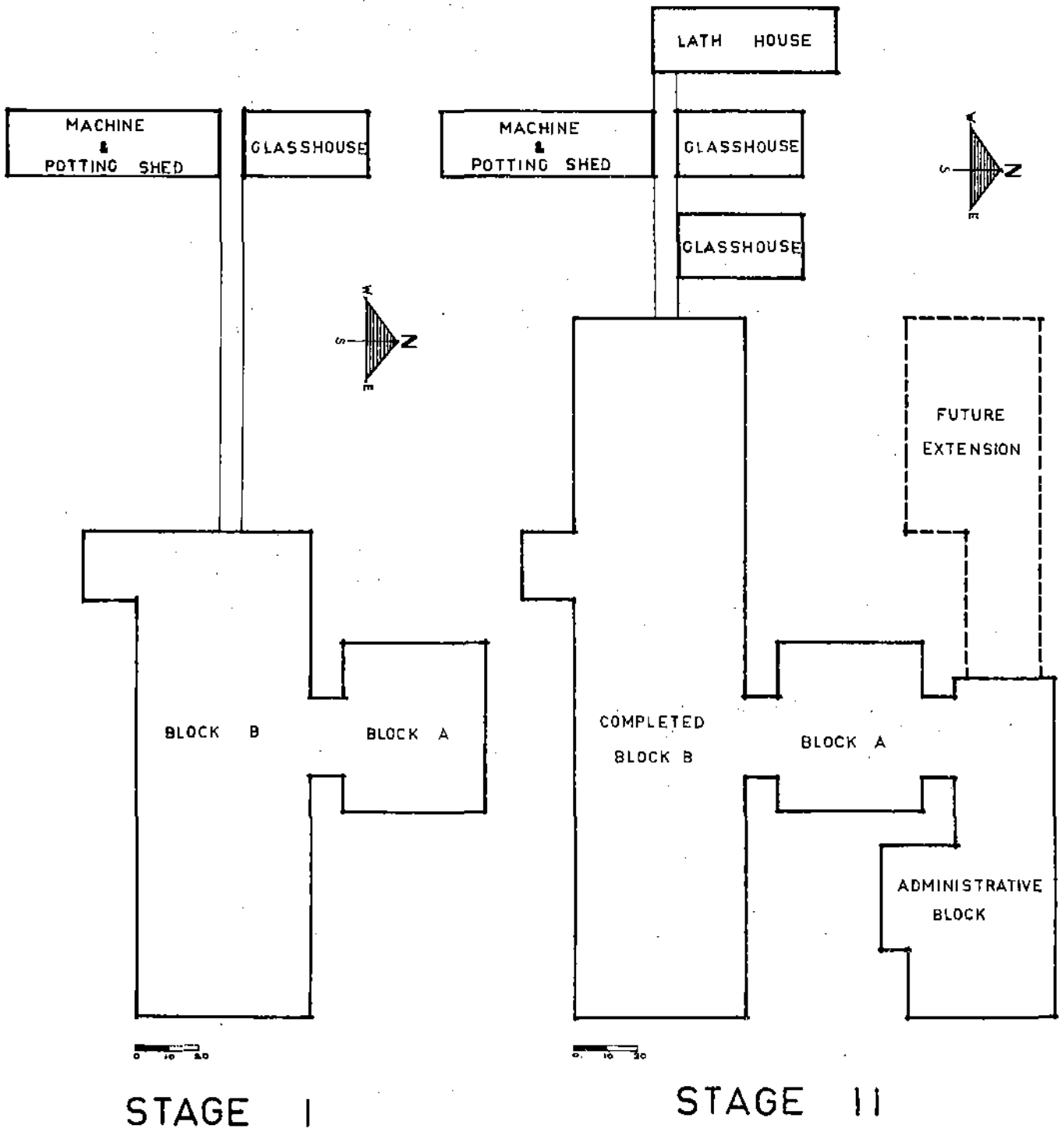
It is obvious too that studies on milling and baking qualities are of prime importance if we are to hold and enhance the standing of Queensland wheats. The cereal research equipment will ultimately be transferred by the Department of Agriculture and Stock from Brisbane to the Institute. There will be difficulty in implementing this policy fully until Stage 2 of the Institute buildings is completed.

It will be apparent to all that the liaison which has been established with the Department of Agriculture and Stock will allow us to concentrate our funds on new and better facilities for our research workers and that our immediate material gain is far beyond our cash outlay.

Obviously the work done at or through the Institute will indirectly benefit all forms of grain production and also the stock industries.



THE QUEENSLAND WHEAT RESEARCH INSTITUTE



The Institute Itself

The area of land attached to the Institute is not of great significance as the primary need is for land to accommodate buildings, glasshouses and a small area of special plots.

Research stations and private farms will still be needed and used for field investigations associated with the more basic investigations to be carried out at the centre.

The area of seventeen acres on which the Institute is situated has a splendid easterly aspect, adequate land for buildings and about ten acres of first class cultivable land for the establishment of plots.

On 19th March, 1959, the land was resumed as a reserve for a wheat research station held by the Minister of Agriculture and Forestry for the Department of Agriculture and Stock as trustee, as the Queensland Wheat Industry Research Committee has no power to own any property. Its sole responsibility is the selection of projects for support from the funds derived from the Wheat Tax, and the allocation of funds. The Technical Advisory Sub-committee determined the laboratory and glasshouse facilities required to accommodate the research on the control of wheat diseases, soil fertility and wheat quality research.

Total cost is estimated to exceed £130,000.

Stage 1, provides laboratory facilities for plant pathology, plant physiology and cereal chemistry as well as a number of small ancillary laboratories, a glasshouse and a potting shed.

Later in Stage 2, we plan to add the soils laboratory, an administrative wing, and another glasshouse.

The Institute will house a group of research officers and will be used to speed up basic research into problems of soil fertility, wheat diseases, particularly soil borne diseases, and wheat quality. Research in the field will still continue on Experiment Stations of the Department of Agriculture and Stock and on private farms.

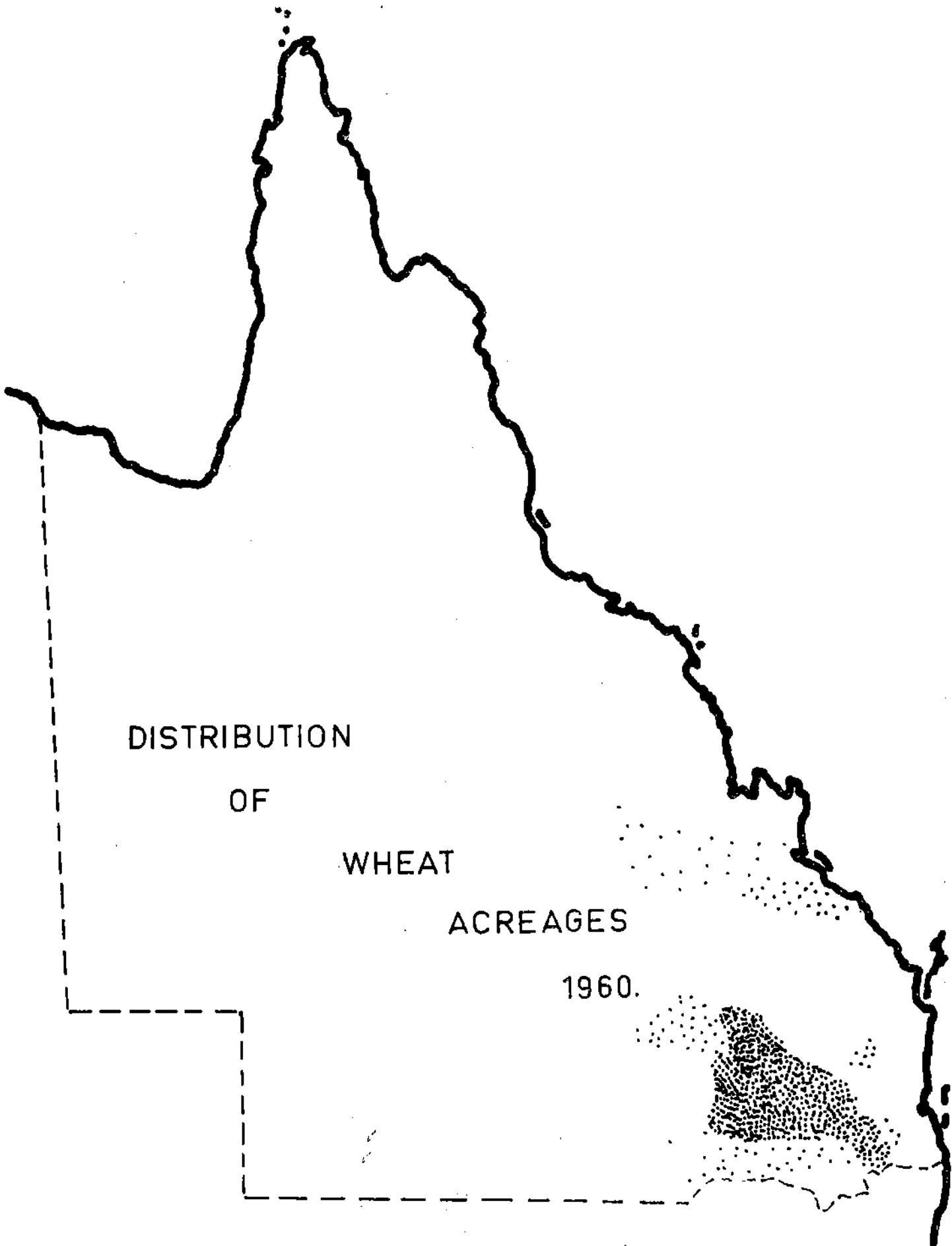
"TODAY'S RESEARCH IS TOMORROW'S PROGRESS"



Plant disease studies are vital for sustained economic production.

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DISTRIBUTION
OF

WHEAT

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