

SCIENCE AS AID TO PRODUCTION

In a country like Australia, where the man on the land is responsible for the production of so large a part of the wealth, the importance of agricultural research cannot be overstated. The dairyman, the pastoralist, and the wheatgrower are continually finding themselves faced with some problems which can be solved only by the investigation of trained men.

Much valuable work on plant problems has been done by State agricultural departments, but the men responsible for it have been often hampered by routine duties or through having a number of different tasks allocated to them. There has been need for concerted effort to attack in a systematic way many of the fundamental problems underlying the practice of the agriculturist.

The Council for Scientific and Industrial Research, which was recently reorganised and richly endowed by the Commonwealth Government, will supply that requirement. It is conservatively estimated that the loss suffered every year in Australia through plant diseases alone is £5,000,000. In a bad year the loss from the sheep blowfly pest is calculated at £4,000,000.

With commendable enterprise the Council has set to work. Distinguished British scientists have been invited to visit this country and young Australian graduates have been sent to America to receive training in entomology, so that they may render valuable service in combating insect pests.

At the Waite Agricultural Research Bureau the Council will erect a special insect-proof glasshouse for the investigation of tomato wilt and other similar plant diseases.

After a survey of the Murray and Murrumbidgee settlements a committee of the Council made recommendations for a general attack on soil problems and many questions affecting citrus fruits and vines. These are two of the many avenues along which the scientists can work to aid production and minimise loss.

It is reasonable for the primary producer to suspect that a full return is not always given for money spent by Government departments. In the case of the Council for Scientific and Industrial Research he has the consolation of knowing that the money expended is a sound investment.

NEWS 5-10-26

LATE JUDGE MITCHELL

BURIAL AT NORTH ROAD

Large Attendance at Funeral

In the presence of a representative gathering the remains of Judge Mitchell were buried at North Road Cemetery yesterday afternoon. The Rev. R. M. Fulford officiated.

Shortly before 4 o'clock a service was held in Holy Trinity Church, North terrace, a recital of the thirty-ninth and ninety-ninth Psalms was given. The cortege left the church for the cemetery at 4 o'clock.

Pallbearers were Messrs. H. K. Paine, G. W. Halcombe, H. M. Muirhead, and S. D. Ronald, S.Ms. Chief mourners were Mrs. Mitchell, Mr. Garnet Mitchell (son), Mrs. MacDonald (daughter), and Mr. Edwin H. Peake. Many beautiful floral tributes were seen. Among those at Trinity Church and at the graveside were:—Sir George Murray (Chief Justice), Mr. Justice Napier, Mr. Acting Justice Richards, Hon. W. J. Denny (Attorney-General), Senator J. Newlands (President of the Senate), Hon. Sir Henry Barwell, Hon. J. H. Cooke, M.L.C., Mr. F. W. Birrell (Speaker), Brig.-Gen. S. Price Weir (Public Service Commissioner), Brig.-Gen. R. L. Leane (Commissioner of Police), Hon. F. W. Conybeare, Mr. E. M. Sabine, P.M., Mr. W. Hall, S.M., Mr. A. W. Piper, C.C.

Messrs. E. M. Smith, R. G. Coker (representing the Harbors Board), J. V. Leneuve Smith, K.C., W. A. Rollison, A. S. Blackburn, W. L. Stuart (Master of the Supreme Court), F. B. McBryde (Deputy Master of the Supreme Court), O. Schomburgk (Sheriff), M. H. Walter (Registrar-General of Deeds), B. S. Roach (representing the Education Department), F. W. Sims, R. A. Peake, E. J. Thomas (member of the Licensing Court), T. S. O'Halloran, K.C., G. G. Martin (Secretary Attorney-General's Department), Inspectors Whittle and McGrath (Police Department), F. E. Benda, Hilary Boucaut, Arthur Searcy, W. H. Denyer, C. E. Tucker, W. H. Howell, R. T. Wallman, G. Sharp, Fred Johns, T. C. Holland, P. Johnstone, A. E. Jolly, H. Clark, W. Glen (Sydney), W. J. Hill, Edwin Johns, Percy Hague, and officials of the various courts and other Government departments.

Pallbearers at the graveside were Hon. W. J. Denny (Attorney-General), Mr. E. M. Sabine, P.M., and Messrs. H. K. Paine and L. H. Haslam, S.Ms.

Wreaths from the following were noted:—Miss Alice Rosman (London)

Mr. H. K. Paine, S.M., Mr. G. F. Michell, Mr. C. F. J. Crompton, Miss Jean MacDonald, officers and brethren of the Public Service Lodge, Mr. W. Whitehead, Mr. G. A. and Miss Wallman, Miss Nance MacDonald, Mr. and Mrs. M. C. Lathlean, Chief Inspector of Factories and Steam Boilers and staff.

Messrs. Archie and Billy MacDonald, Mr. and Mrs. F. Weaver, Bench and Bar of Port Pirie, Dr. and Mrs. Dunstone, Board of Governors of Botanic Gardens, Mr. and Mrs. Mackintosh, Miss Beatrice Chettle, Mr. Billy Peake, Mrs. Wood Jones, Mr. and Mrs. H. E. Dunstone, Mr. C. E. Sampson, Mr. and Mrs. M. H. Salter, Mrs. J. W. Davis, Mr. and Mrs. E. H. Peake, Mrs. H. Lang, Mr. and Mrs. W. K. Mallyon, Mr. and Mrs. G. A. J. Webb, Mr. Hiram W. Varley, Miss Lake, Dr. and Mrs. Proctor, Mr. and Mrs. Andrew Woods, Mr. and Mrs. Bleechmore, Miss Ada Martin, Mr. Royston and Miss Josephine Matthews, officers of Insolvency and Local Courts, Mr. W. W. Forwood, Mr. and Mrs. A. Newbould, Mr. and Mrs. A. E. Jolly, Miss Partridge, Mr. and Mrs. A. C. Weaver, Justices' Association of Western Australia, Justices' Association of South Australia, Mr. and Mrs. R. Ingleby and family, Miss Amy L. Tomkinson, Dr. and Mrs. Palleine, Mr. and Mrs. H. L. Kekwick, and Mr. and Mrs. Eric Lang.

Eulogy from Chief Justice

Sir George Murray (Chief Justice) in the Full Court this morning, speaking of the late Judge Mitchell, said that on behalf of his colleagues and himself he wished to say how deeply they felt the loss that had been sustained. The late judge had given conspicuous service to the State in many ways—as legislator, administrator, and judge. His work in all offices had been marked by earnestness, independence, and a high sense of public duty. Considering the large number of cases that had come before him there had been singularly few appeals from his decisions. The loss of such a man to the judiciary of the State was severe, particularly at a time when the pressure of work in all the courts was so heavy. Mr. G. C. Ligertwood, on behalf of the Bar, said that the fairness, courtesy, and impartiality of Judge Mitchell in the administration of justice in the Adelaide Local Court and the Court of Insolvency had been much appreciated by the profession.

Sympathy of Justices

At the conference of justices today Lieut.-Col. J. W. Castine moved and Mr. A. J. Cantor (Western Australia) seconded: "That on behalf of the honorary justices of Australia this conference desires to convey its sincere sympathy to the widow and family of the late Judge Mitchell in their bereavement." The motion was carried, delegates standing in silence as a mark of respect.

Scientists Face Many Problems

MILLIONS NOW LOST MAY BE SAVED

"More damage is being done by unsolved agricultural problems than by drought or fire," is the contention of Mr. G. A. Julius (chairman of the Council for Scientific and Industrial Research).

In an interview Mr. Julius explained what is being done by the council to solve them.

The council is a Commonwealth body, but appoints different committees of representatives from all States to investigate matters of importance to the man on the land.

It took the place of the Institute of Research, an organisation which labored under many disabilities. The new council and its committees are covering a wider field than the institute did.

In an interview Mr. Julius explained some of its tasks.

"At first blush," said Mr. Julius, "nothing could seem more remote than the connection between the breeding of a prize bull and the research of a scientist. To the casual spectator the breeding of these magnificent animals may seem a mere matter of course.

"It would surprise him to know that to reach a standard the scientist must co-operate with the farmer, with the dealer, with the slaughterer, with the shipper, and work out the best means of ensuring, let us say, that the meat we export shall be as good as that sent away by the Argentine.

Uphill Fight

"Today we fall far below that country. The way to their high standard is long and uphill. We may never reach it, but it is no exaggeration to say that the chief agent of possible success is not the breeder, but the research student.

for their intensive training abroad. Eight scholarships were arranged from the funds at our disposal, and suitable types were sought for the training projected. This takes place in the United States and Great Britain. Eight men in all are being trained for our work. They have contracted to come back and work with us for three years.

Men for Training

"We shall, so far as is possible, continue the practice of sending good men away for training. Many more will be needed, and we are continuously on the lookout for brilliant, keen young graduates. As they return they will be placed in various parts of the Commonwealth, to take their positions in the line of battle.

"We have refrained from establishing a centralised organisation. We find it better to use existing State agencies, such as universities and departmental laboratories. There are, however, certain problems that must be undertaken ultimately by a central organisation.

"Forest products work is one of these. It is one of the most important things we are facing. We have been squandering our forest substance most shamefully. As an instance, let me say that in a typical sawmill the wastage is often as high as 85 per cent.

"Modern science can effect a saving in many directions. Science can show a better use of the timber itself, and means for



MR. G. A. JULIUS

chairman of the newly constituted Council for Scientific and Industrial Research.

"The farmer may be unconscious that science has a large role to fill in improving his handiwork. Science would seem to him to have less concern with the working of his farm than almost anything he could think of. And yet it could be demonstrated that behind the wool, the mutton, the cattle of Australia, lie concealed problems that can be tackled only by trained minds.

"There are pests that attack both animal and plant life whose elimination will add millions to the wealth of this country. Science is already organising to fight these enemies of prosperity.

"More damage is being done by unsolved problems than by drought or fire. Science is not a cold entity sitting aloof concerned only with laboratories. Not the humblest activity of our communal life is free from the beneficial touch of science. It walks hand-in-hand with prosperity; its defeat would mean the diminution, the running to seed, of almost every means whereby we live.

"Almost the first thing the council had to do before preparing a programme of offence against menacing conditions was to get hold of suitable men and arrange

utilising what now is destroyed as waste. "There are, of course, the important subjects for research into animal and plant pests. The blowfly costs Australia millions; its eradication would be of incalculable importance. Other matters of hardly less advantage are pending to this. Problems concerned with the growing of fruit, its transport and preservation from pests, are today calling insistently for increased investigation.

"I have touched on the problem of improving the standard of meat for export. Much work must be done in improving the breeding and the quality of the meat. Arrangements are already being put in hand to effect this. With regard to sheep breeding, matters are on a satisfactory footing in comparison with cattle. We lag far behind the Argentine. The first step in overcoming a difficulty is in recognising it.

A committee of the council, which has already visited the chief irrigation areas, including the River Murray settlements, comprises Prof. R. D. Watt (chairman), Prof. J. A. Prescott, of the Waite Research Institute, and Mr. G. Laing, of the Victorian State Rivers and Water Supply Commission.