

MEDICAL COURSE EXPENSIVE

Cost Exceeds £400 In Adelaide

In addition to providing living expenses and pocket money for six years, a parent has to spend about £410 to give a student a complete medical course in Adelaide.

But in spite of this there has been a steady increase in the number of medical students at the University since 1934.

There is a general shortage of medical officers throughout Australia. Last year both the Adelaide and Children's hospitals were seriously short-staffed. The Government has therefore been necessary for the Children's Hospital, and the position at the Adelaide Hospital has made satisfactory when nearly every 1934 graduate applied for admission.

In 1929 there were 102 medical students at the University and the figures for the following five years show a steady increase—116, 120, 133, 142, and last year 146.

The medical course extends over six years and has a very wide range. The fees for the course are:—

Matriculation	£ 1 0
Lecture fees, six years at	1 0
Books, 40 years	240 0
Students' Union, 25%	7 10
Laboratory deposits and materials	11 0
Medical and surgical practice, during 4th, 5th, and 6th years	25 4
Anatomical dissections	3 3
Pharmacy	2 0
Entrance to Adelaide Hospital in 4th year	10 10
Course of instruction at Children's Hospital (nominal fee)	1 1
Attendance at Queen's School during 4th, 5th, and 6th years	21 7
Cost of books, instruction, and other (rough estimate)	90 0

When it is realised that apart from the outlay for instruction and living expenses, the student sacrifices six years of earning power, the ultimate cost of the course is extensive to both the parent and the student.

Applications Close on March 1 For Creswell Scholarship

Applications will be received until noon on January 30 from the sons of members of the Royal Agricultural and Horticultural Society for the John Creswell Scholarship for the study of commerce course at the Adelaide University. Candidates must have passed the intermediate commercial leaving commercial, or leaving examination of the University, and be under 25 years of age. The scholarship is tenable for five years.

ADV. 191-35

Results of Researches at Waite Institute

MELBOURNE, January 18. Dr. A. E. V. Richardson, of the Waite Agricultural Institute, in an address to the Agricultural Science Congress today, said that researches on the effect of nitrogenous fertilizers on the growth of wheat and barley had been conducted at the Waite Institute for several seasons. Comparisons were made over a five-year period to determine the effect of nitrogen on the yield of wheat sown both on bare fallow and on stubble ploughed land. The moisture and nitrate nitrogen contents of the soils were determined at periodic intervals, and practical studies were made to evaluate the various factors contributing to the yield of the crop.

Dr. Richardson pointed out that the response of wheat to nitrogenous fertilizers on well-worked fallow was not sufficient to be profitable. On stubble ploughed land, however, sulphate of ammonia, in quantities ranging from half to two hundred-weight per acre, gave profitable increases in crop yield at normal prices for wheat and fertilizers. The mean increase in yield per acre was 4.5 bushels, and the total was 84 bushels of grain for an application of one hundred-weight of sulphate of ammonia. The increase in moisture content of the fallow and the stubble ploughed soil at each time was also observed between the moisture differences were found in the nitrate nitrogen content. The fallow always

contained considerably more nitrate nitrogen at seeding than the stubble ploughed land. The difference was of equal importance in a region of liberal winter rainfall as the lack of nitrate nitrogen in a stubble soil was relatively more serious under a lack of rainfall.

"Equivalent quantities of nitrogen applied in various forms over a period of five years showed that a rate of 50 lbs. of soda gave the largest increase in yield. No significant difference occurred between the increases given by sulphate of ammonia, urea, and urea. Census studies on the growing crop showed that the main effect of sulphate of ammonia was to produce a vigorous burst of tillering, resulting in a greater number of ear-bearing tillers per acre. This was the major factor accounting for the increase in crop yield.

Remarkable Increases
"Although wheat should be sown on bare fallow, statistical records in all States show that the best wheat and urea. Census studies on the growing crop showed that the main effect of sulphate of ammonia was to produce a vigorous burst of tillering, resulting in a greater number of ear-bearing tillers per acre. This was the major factor accounting for the increase in crop yield.

"Census studies show that the main effect of sulphate of ammonia on barley and oats is to increase the number of tillers," he said. "Confirmation of these results of the value of nitrogen on stubble soil was obtained when barley has been obtained during the past season at a number of centres in Victoria and South Australia."

FARM PRODUCTION AND DEPRESSION

Prof. Giblin On Price And Production Trends

In the face of a severe downward movement of real prices in Australia, there has been a substantial increase in production, which was continuing, said Professor J. F. Giblin, of the University of Melbourne, in the course of a paper on "Farm Production and the Depression." In spite of the raising of the price of sugar, butter, dried fruit, cheese and other products, the price of farm produce had fallen 40 per cent, real prices 20 per cent, and yet farm production had increased 16 per cent. Although the expansion by the community to farm production was substantially taken into account in the Government's budget, the expectation of further Government assistance as one factor in the persistence of the depression.

"The maladjustment of the Australian economic structure is very grave," Professor Giblin said. "We have no plan for rectifying it. Our procedure promised to be to give some measure of relief to primary industries by means of a home price for home consumption, and perhaps some relief of other export industries. The effect can be only to maintain or increase production at the level of the present demand. There is, further, the effect of the home price on other export industries. Here the effect of the home price must be at the expense of other export industries. The relief to primary industries is a relief, and the process must be accompanied by a rising tariff to preserve the home price. This process seems to be likely to be never ending. The relief of one industry will tend to expand again beyond the economic limit, and at the same time contract the limit of other export industries can probably be effected."

ADV. 191-35

DR. A. E. V. RICHARDSON HONORED

President of New Institute of Agricultural Science

MELBOURNE, January 18. Dr. A. E. V. Richardson, of the Waite Agricultural Institute, was honored as President of the new Institute of Agricultural Science today. The Institute was formed at a meeting held at the University tonight, when an Australian Agricultural Science Association was formed. The objects of the institute are for the advancement of agricultural science and, in connection with other organizations, the furtherance of agriculture.

It was decided to hold biennial meetings corresponding in time and place to those of the Australian and New Zealand Association for the Advancement of Science. Dr. A. E. V. Richardson, of the Waite Agricultural Research Institute, Adelaide, who is one of the most eminent scientists engaged in agricultural research in Australia, was appointed the first President.

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During the Centenary celebrations, Dr. Davy was the guest of the University Women's Graduates' Association, Central Club, British Musical Society, Melbourne Music Club, Australasian Music Teachers' Association, Victoria, and the Cambrian Society.

NEWS 191-35

Drama Behind Fossil Search By Scientists in the Adelaide Hills

How Drama lies behind learned scientific inquiry was revealed to the public section of the Adelaide Hills today when R. J. Tillyard told a collaboration with Sir Edgeworth David that ended in the loss of his beloved collection.

In the face of incredulity and scorn Sir Edgeworth David struggled for nearly 40 years to prove the existence of genuine fossil remains of animals in the protozoic or pre-Cambrian rocks around Adelaide—to trace the history of life from the Cambrian strata from 900 million to 1,600 million years old.

Although Sir Edgeworth David died a bitterly disappointed man, the controversy still goes on. Dr. Tillyard said that Prof. David regarded his discovery of protozoic fossils as life as the greatest and most enduring of all the scientific activities of his long and useful life.

Dr. Tillyard admitted that when he came to Australia in 1928 from New Zealand, he shared the prevailing view about Sir Edgeworth's discoveries. But he was convinced that the fossils were by Dr. C. Fenner to the Teatree Gully and other beds, and he found there specimens which convinced him that Sir Edgeworth was right.

NEWS 191-35

TEACHING OF BIOLOGY SUPPORTED

Difficulty Of Finding Room In Curriculum

The teaching of biology in secondary schools and particularly in secondary classes, suggested in a motion by Professor W. J. Dakin, Professor of Zoology in the University of Sydney, at a combined meeting of the zoology, botany, and education sections at the Science Congress, Melbourne, has received favorable comment in Adelaide.

The Director of Education (Mr. Adey) said that botany and physiology were taught in the high schools where proper equipment existed, but the Public Examinations Board of the Adelaide University had decided to eliminate botany as a subject for the Higher Public Examination, which was the equivalent of the present Leaving Home.

Discussions were being held continually with regard to the inclusion of what were known as the "living sciences" in the school curriculum, but the curriculum was becoming so crowded that it was difficult to decide which subjects should be left out, especially in primary schools. Many scientists were voicing the opinions of many educationists who favored the introduction of the living sciences. In the more advanced curriculum of the high schools, botany and physiology were taught.

The headmaster of Scotch College (Mr. N. M. G. Grattan) said that the fundamental reason why educationists urged the introduction of the teaching of biology into schools was because of the intellectual knowledge biology gave of life and its reproduction, and not because biology was associated with certain professional causes, or for its utilitarian value. In recent years the amount of sex had appeared more openly in society—novels, plays, and conversation.

Youth obtains an inaccurate and accidental knowledge of sex as it grows when such knowledge is productive of "hard graft," said Mr. Grattan. He added that parents, ministers of religion, and schoolmasters generally had evaded the proper instruction of youth on the subject because they did not realize the importance of it, but probably from a false sense of delicacy. Also because they were not quite sure of the method of procedure. Mr. Grattan said that biology had not been a common subject of the curriculum of schools, but the subject was now becoming more evident in scholastic institutions. The teaching of biology would help towards a cleaner and saner knowledge of sex.

The headmaster of Prince Alfred College (Mr. J. P. Mann) also agreed with Professor Dakin, if there were more room for the teaching of biology in schools. He said that little biology was done in a general way in the middle school. The principle of biology as a subject had it was hard to get down to practical work.

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