

The cellular structure of organisms was illustrated from a wall chart. The constancy of the chromosome number was explained by reference to a diagram showing the mechanism of cell division. Actual photographs showed stained chromosomes in Acacia baileyana pollen cells, and living chromosomes of Tradescantia being manipulated with micro-needles. The fusion of two nuclei, the central feature in sexual reproduction, was shown by photographs of Acacia baileyana, taken at different stages to illustrate how the sperm nucleus from the pollen grain approaches and gradually fuses with the egg nucleus. The fusion nucleus has twice as many chromosomes as either of the participating nuclei. To maintain the constant chromosome number for the species there must be a compensating halving at some stage. The mechanism of reduction division or meiosis was explained from a diagram.

The study of genetics has advanced principally through the consideration of isolated pairs of characters. Mendel's classical experiments were quoted, and some aspects of segregation and dominance were discussed.

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JAMES DALL.

The name of Dall is preserved for all time in the specially fine species of Pittosporum and Celmisia which have been named after him; but few botanists seem to know much about Dall himself. When I visited Collingwood recently, I met some people who had known him well, and who were able to give me an interesting account of his life in that district; my chief informant was Mrs. W. J. Jamieson of Collingwood.

Dall was born in Yorkshire on November 25th, 1840. In his early teens he went to sea and had a very hard time, as other lads did in those days. After many years at sea he landed at Nelson. His interest in natural history finally led him to Collingwood and he settled at Rockville more than sixty years ago. There at Dall's Creek he had a nursery garden and made a living as a botanical collector. He sent New Zealand plants and especially ferns to gardens all over the world. Also, as a minor interest, he did a bit of taxidermy and had a collection of birds, some of them caught by two dogs that he had trained.

He is remembered as a very kindly old man with a long beard, who rode about on a white horse called Hatter. He used to go away into the back country with his animals, but also packed enormous swags himself.

Twice between 1880 and 1890 he went to Melbourne Exhibitions and he won a Gold Medal for his exhibit of Wardian cases of New Zealand ferns. On each occasion he remembered to send back toys to the village children whom he had persuaded to clean seeds for him.

His trade in growing and selling ferns belongs to that period when no drawing room was complete without its Wardian case of ferns. There is much that went out of fashion at the end of last century that we do not regret, but the growing of ferns to grace our rooms is a practice that botanists might well revive.

Dall explored the rough back country around Collingwood very thoroughly. He is known to have kept diaries but they were burned. It is a matter for regret that there is so little known about Dall's collecting because he must have had a very good knowledge of the plants of a particularly interesting district.

James Dall told people that his name should be pronounced to rhyme with ball. Will people who call Dahlias "Dallias" be persuaded to pronounce Pittosporum dallii as Mr. Dall would have expected?

Greta B. Cone.

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EARLY KOWHAI.

Mrs. Mason reports that she noticed kowhai blooming at Faremata on 11th June. One overhanging the footpath in Bolton St. is usually among the first and in 1942 had a flower by July 8th. This year at the end of June it still has all its leaves and only tiny flower buds. Any more records please?

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