



COMMONWEALTH SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANIZATION

TASMANIAN REGIONAL LABORATORY

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5/7/63

"STOWELL".

STOWELL AVENUE.
HOBART, TAS.

Prof. T. A. Davis
Indian Statistical Institute
203 Barrackpore Trunk Road,
Calcutta 35, India

Dear Prof. Davis:

Recently I have examined your article in the Journal of Genetics and am greatly flattered by the comments upon my work.

Since my letter of 17/10/62 I have been giving some thought to the longitude effect related to *Cocos nucifera*. This may be a common phenomenon of plants with random direction of twine. Such plants are mentioned in a cursory way in the literature but nothing is known of their performance. The whole subject seems to be a scientific void. Some of the lily family apparently exhibit this characteristic, but I have not yet been able to secure specimens.

Last April I again visited Flinders Island and secured specimens and seed of the bindweed. It may be a variety of *Kuehlienbeckia*. The plant may cover several hundred square feet with a mass of tangled twining stalks. The single root near the center seems to go down many feet. The plant grows by branching stalks rather like a tomato vine. The dominant direction of twining is clockwise. However frequently a stalk appears which turns counterclockwise. The direction of twine is fixed at point of forking as a given stalk will maintain its direction of twining from one support to another over a total length of a dozen feet or more. The number of counterclockwise stalks varies from about 10% on young plants to 30% on old plants.

The vine is a perennial which apparently propagates by seed. Most wild specimens are in a vast tangle so it is quite difficult to sort the seed into direction of twine of stalks. However I now have a good supply of seed of unknown direction of twine. Enclosed are 100 seeds. About 20 percent probably are from counterclockwise (right hand screw thread) stalks. The fertility rate of this kind of vine is usually low. I will be pleased to have you plant the seeds at your convenience. These seeds need only 1/16" covering. The soil should be one third fine sand and of loose texture. Considerable moisture is required to germinate the seed. Once the plant is established, very little water is required. The vine grows in arid places and supplies the local farmers with some rather coarse green stock feed during droughts when the grass turns yellow.

Presently I am starting similar tests here. It will be interesting to see what percentage new vines and stalks voluntarily turn counterclockwise. If successful, I can supply seed for other places of different longitude. However, interested, capable and conscientious people will be required to look after the vines and report the results.

I am,

Sincerely yours,

Grote Reber
Grote Reber