

7th March 1961

Dear Dr. Guild:

Thank you for your letter of 24th January which found its way to me here. A reprint of Reversed Bean Vines may be obtained from my principals:

Research Corporation  
405 Lexington Avenue  
New York 17, New York

I have tried three varieties of pole beans in West Virginia and Tasmania. They all turned same way (right hand screw thread) in both hemispheres. However there may be other vines which will turn differently. I have never seen any evidence on the subject, other than what I've done.

There is a wide variety of possible future experiments. As you suggest, experiments similar to mine could be tried with other vines. If possible, find some vines turning like left hand screw threads.

Also take some beans and have them subjected to X-Rays. Use values of 5000, 10,000, 15,000 and 20,000 R. There will be a high mortality in the larger values, so put plenty of seed in a hill. I've done this but would like some one else to give it a try. The purpose is to try to induce a bean vine to turn backwards of its own accord. Tell me what you find happens.

Another possibility is to cause vines to grow in strong axial magnetic fields or strong radial electric fields of different polarities. I've not tried this, but hope to.

It might be possible to grow bean vines in pots placed on slowly (one revolution per hour) revolving turntables, some going one way, some the other way.

Try putting small bits of radioactive material on the pole around which the vine climbs.

Put some vines in glass enclosed soundproof boxes. Apply a whistling note inside some boxes but not others.

You can think up other ways of torturing the plant. In all cases, some control plants will be needed to make sure an effect is real.

Wishing you luck on twining vines, I am

Sincerely yours,

*Grote Reber*  
Grote Reber