

PRINCETON UNIVERSITY  
PRINCETON, NEW JERSEY

Department of Biology

19 NOV. 1959

Reply To  
P.O. Box 704

MR. GROTE REBER  
GREEN BANK, W. VA.

DEAR MR. REBER,

PROF. BUTLER RECENTLY TOLD ME OF YOUR INTEREST IN SPIRAL GROWTH IN PLANTS, AND OF YOUR INTERESTING EXPERIMENTS ON THE SUBJECT.

THERE HAVE BEEN MANY PAPERS --MOSTLY OF A RATHER CASUAL NATURE--ON SPIRALING. A NUMBER OF PEOPLE HAVE ALREADY CHECKED WHETHER SPIRALING IS DIFFERENT IN N. AND S. HEMISPHERES (AND, AS YOU FOUND, I HEAR, IT IS NOT). TO GIVE YOU A LEAD INTO THE LITERATURE, YOU MIGHT LOOK UP A PAPER BY PRIESTLEY 1945. AMERICAN JOURNAL OF BOTANY 32: 277-284, ON SPIRAL GRAIN IN TIMBER. THIS TOPIC HAS BEEN ONE OF THE MOST OFTEN INVESTIGATED OF THE "SPIRALITY" IN ORGANISMS TOPICS.

VERY FEW PEOPLE HAVE DONE ANY THOROUGH EXPERIMENTAL WORK ON SPIRAL ASPECTS OF GROWTH, TO MY KNOWLEDGE. ONE OF THE FEW RECENT STUDIES OF THE PHYSIOLOGY OF SPIRALING IS BY DR. SEYMOUR SHAPIRO OF THE BIOLOGY DIVISION AT BROOKHAVEN NATIONAL LABS, LONG ISLAND, N.Y. HE HAS FOUND A SPIRAL POLARITY IN SOME FACTOR --AS YET UN-IDENTIFIED --WHICH CONTROLS BUD FORMATION ON CUTTINGS.

I DO NOT KNOW OF ANY GOOD REVIEW OF WORK ON SPIRALING. MY IMPRESSION IS THAT THIS IS DUE TO THE LACK OF ADEQUATE RESEARCH, RATHER THAN TO LACK OF INTEREST. IF YOU PLAN TO CONTINUE YOUR EXPERIMENTS, YOU MAY EASILY FIND YOURSELF THE WORLD AUTHORITY ON SPIRALING! --THERE IS THAT LITTLE BEING DONE IN THIS INTERESTING FIELD.

PLEASE SEND ME ANY PUBLICATIONS WHICH COME OUT OF YOUR RESEARCHES, AND LET ME KNOW IF I CAN HELP YOU IN ANY WAY.

GOOD LUCK,

YOURS SINCERELY,

  
WILLIAM P. JACOBS

ASSOC. PROF. OF BIOLOGY