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April 17, 1979

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Dear Bill:

I will reply to your letters of March 20 and April 4 and, in addition, pose a question for you.

The An+ stocks that I sent were my only copies! All of the strains were originally vegetative isolates from the same clone. The ones which you could not revive were not employed in our experiments (Howell, <u>et al.</u>, <u>J. Cell Biol.</u>, 1971). Therefore, the loss of these strains is not very serious.

The natural death mutant is maintained as a balanced heterokaryon (pe;fl;pan-1) (nd,al-2;lys-1)A,FGSC no. 863. The sample you sent us several years ago conidiates poorly on Vogel's minimal at either 25 or 30°. Its "ratty" appearance is partly due to the microconidial phenotype of pe;fl. We have always been able to obtain sufficient conidia for plating to recover homokaryotic nd. The copy you sent on April 4 looks like our sample, weakly conidiating. nd homokaryons carry two genes not linked to nd or to one another which, alone or in combination, reduce the extensional growth rate of either nd or wild type by 50% (Mech. Age. Develop. 5, 1976,1979). We backcrossed nd;al-2 to Oak Ridge wild type 7 times (ibid). I have a culture F-7 (nd;al-2;lys-l+) (+;+;lys-l)het which has been maintained several years at -20°. I am in the process of testing the viability and genetic integrity of this culture. The backcross nd progeny and the heterokaryon conidiate vigorously. If all goes well, I will send you the het.

My final point concerns the anhydrous silica gel method of storage in the maintenance of viability and <u>genetic integrity</u>. Specifically, in regard to the Oak Ridge wild-types you sent in January (FGSC 987 and 988), what was your acquisition date from FJD? Had they been maintained on silica gel continuously since that date?

We are engaged in experiments on the genetic control of conidial longevity and have found spontaneous variants with markedly different life spans. We wish to know if such "genes" exert plieotrophic effects in growth and development. Such a question requires clean wild types. We crossed the Oak Ridge wild types reciprocally and found the