Strains B1 and F29 are not being sent for the following reasons: David Perkins (personal communication) found a reciprocal translocation in B1, with which my group had mapped the ure-3 locus incorrectly to LGIR. I then sent Perkins F29, which he found lacked this translocation, and with which he mapped ure-3 to LGIIR. Perkins offered, two months ago, to deposit both mating types of F29 in the FGSC as coming from me. If by chance he has not done so, let me know, and I shall send you F29.

A caution about strain D2. This strain showed no recombination among 45 progeny from a cross to a ure-1 allele, and thus appeared to map at the ure-1 locus; however, D2 failed to complement representatives of all four ure loci and so may be a regulatory gene. Future genetic analysis of greater numbers of progeny may possibly resolve D2 and ure-1 as distinct loci.

The published information about the seven urease defective strains is in Haysman and Howe (1971). Strains A7 and S3 mapped to LGV but recombined with each other and with ure-1 and ure-2. Alcoy analyses with E3 and E7 (which complemented each other) implicated LG IV or V; other crosses to LG V markers indicated no linkage, making LGIV more likely for both E3 and E7. Alcoy analyses with C5, K3 and R2 implicated no linkage groups. C5 and K3 complemented each other, but R2 complemented neither C5 nor K3.

I have some qualms about sending you so many strains, especially since some are recurrences and some are poorly mapped. I have done so primarily at the urging of David Perkins. I am also enclosing a "Record of Neurospora Culture" deposit sheet for each strain. The information in this letter is furnished in an attempt to tie together, briefly, the fuller treatment given each strain on the deposit sheets.

Sincerely yours,

Branch

H. Branch Howe, Jr.
Professor

HBH/kds

c.c.: David D. Perkins