Long term viability of *Neurospora crassa* at the FGSC

Kevin McCluskey - Fungal Genetics Stock Center, Department of Microbiology, University of Kansas Medical Center, Kansas City, KS 66160 USA

Lyophilized samples of *Neurospora crassa* were tested following storage for many years. The oldest viable stock was preserved in 1946. Some samples that were preserved more recently were not viable. The characteristics that predispose a sample to viability remain unknown.

Following a customer request to the FGSC, we endeavored to start strains growing from the Tatum lyophil collection (see Fungal Genet. Newsl. 33:49-58). These particular lyophils are stored at room temperature which at the FGSC is somewhat variable. In all cases, each strain was grown by transferring the contents of an entire lyophil tube to agar-solidified, specifically supplemented Vogel's minimal medium N + 1% sucrose to avoid any possibility of contamination.

The strains that grew varied in age from 37 to 53 years old (Table 1). The oldest strain that was tested was preserved in February 1946. This is one of the oldest samples in the collection. There are four samples from January 1946 and six others from February 1946. None of these other samples has been tested for viability.

While we have not done an extensive literature search, the sample from 1946 represents the oldest sample of Neurospora that has maintained viability in the lyophilized state.

Table 1. Viability of lyophils from the Tatum collection

Strain Designation	Genotype	Date preserved	Result
37401A	*inl*	11/19/58	Live
37401a	*inl*	6/28/54	No growth
5531	*pan-1*	2/6/46	Live
5331-38502	*pan-1, pyr-2*	8/27/54	No growth
Y31881-1-18A	*nic-3, al-2*	8/15/56	Live
Y30539a	*rib-2, ylo, al-2*	8/31/62	Live