

Conidiating colonial strains suitable for replication

D. D. Perkins
Stanford University

Follow this and additional works at: <http://newprairiepress.org/fgr>

Recommended Citation

Perkins, D. D. (1971) "Conidiating colonial strains suitable for replication," *Fungal Genetics Reports*: Vol. 18, Article 14.
<https://doi.org/10.4148/1941-4765.1893>

This Technical Note is brought to you for free and open access by New Prairie Press. It has been accepted for inclusion in Fungal Genetics Reports by an authorized administrator of New Prairie Press. For more information, please contact cads@k-state.edu.

Conidiating colonial strains suitable for replication

Abstract

Conidiating colonial strains suitable for replication

Creative Commons License



This work is licensed under a [Creative Commons Attribution-Share Alike 4.0 License](https://creativecommons.org/licenses/by-sa/4.0/).

Perkins, D. D. **Conidiating colonial strains**
that **are homozygous fertile and suitable** for replication.

from **ascospore platings**. rg cr colonies **are smaller** and replicate well with velveteen or filter paper, but rg cr x rg cr crosses are sterile, so that **applications are limited to conidial platings**. Maling employed cr effectively to study **recombination** by using a 32-pronged replicator and specially prepared **master plates**. rg cr or derivative **microconidiating strains** (rg cr; pe ff) have been used for selecting **auxotrophic (Maling) and radiation-sensitive mutants** (Chang and Tuveson 1967 *Genetics* 56: 801; Schroeder 1970 *Mol. Gen. Genet.* 107: 291).

I have **found another** combination of genes that seems to possess the **favorable features** of both cr and rg cr. When sn (snowflake, C136; Mitchell 1959 *Genetics* 44:847) is combined with cr (B123), the **double mutant** is **homozygous fertile**, and sn cr ascospores or conidia form **compact conidiating colonies similar to rg cr**, that plate and replicate efficiently. (sn, like rg, is located close to the **centromere** of linkage group I not far from cr). **Although sn cr** hasn't yet been tried out in **actual mutant hunts** or recombination experiments, its **potential usefulness** prompts this **preliminary account**.

Crosses are conveniently made in 15 cm tubes on **slants of minimal synthetic cross media** using mixed suspensions of sn cr A and sn cr a conidio. **Perithecia are abundant** but **mature** rather slowly, and **ascospores are oozed** but not shot from the **ostioles**. **Ascospores** from well-aged crosses were suspended, **surface-spread** and heat-shocked on pm-poured plates. The colonies resemble those of rg cr figured by Maling, and **conidiate and pigment well**. Conidio do not become **airborne**. Well over 100 colonies per plate **should be resolvable** when **replicated as** described by rg cr by Maling (filter paper) or Schroeder (velveteen).

m cr stocks of both **mating types** have been deposited with the **Fungal Genetics Stock Center (FGSC#2001 and 2002)**. - - -
Department of Biological Sciences, Stanford University, Stanford, California 94305.

Replication of the **conidiating colonial strains** cr (crisp, B123) and rg cr (ragged, crisp 853, B123) has been **described** by Maling (1960 *J. Gen. Microbiol.* 23: 257). cr x cr crosses are fertile, but colonies are **too large** to make it **worthwhile** to replicate directly