

sstacks

Sets of stacks, i.e. putative loci, constructed by the ustacks or pstacks programs can be searched against a catalog produced by cstacks. In the case of a genetic map, stacks from the progeny would be matched against the catalog to determine which progeny contain which parental alleles. In the case of a general population, all samples in the population would be matched against the catalog with sstacks.

Program Options

```
sstacks [--aligned] -P dir [-b batch_id] -M popmap [-p n_threads]
sstacks [--aligned] -c catalog_path -s sample_path [-s sample_path ...] -o path [-p n_threads]

b - database/batch ID of the catalog to consider (default: guess).

P - path to the directory containing Stacks files.

M - path to a population map file from which to take sample names.

s - filename prefix from which to load sample loci.

c - path to the catalog.

g,--aligned - base matching on alignment position, not sequence identity.

p - enable parallel execution with num_threads threads.

o - output path to write results.

x - don't verify haplotype of matching locus.

Gapped assembly options:
--gapped - preform gapped alignments against the catalog loci.
```

Example Usage

Match each of three samples of progeny from a genetic map against the catalog, one at a time:

```
% sstacks -b 1 -c ./stacks/batch_1 -s ./stacks/progeny_01 -p 15
% sstacks -b 1 -c ./stacks/batch_1 -s ./stacks/progeny_02 -p 15
% sstacks -b 1 -c ./stacks/batch_1 -s ./stacks/progeny_03 -p 15
```

Match each of three samples in a population against the catalog in a single command (saving the time of having to reload the catalog each execution):

```
% sstacks -b 1 -c ./stacks/batch_1 -s ./stacks/sample_01 -s ./stacks/sample_02 -s ./stacks/sample_02
```

Specify a directory containing all of the Stacks files generated with ustacks or pstacks, and cstacks. Then specify the path to a population map that contains all of the samples you

would like to match against the catalog (see here for information on population maps).

```
% sstacks -P ./stacks -M ./popmap -p 8
```

Other Pipeline Programs

Raw Reads

process_radtags
process_shortreads
clone_filter
kmer_filter

Core

ustacks
pstacks
cstacks
sstacks
genotypes
populations
rxstacks

Execution control

denovo_map.pl
ref_map.pl
load_radtags.pl

Utilities

index_radtags.pl
export_sql.pl
sort_read_pairs.pl
exec_velvet.pl