

Tree

Phylogenetic tree showing relationships among *Puccinia* species. The tree is rooted at the bottom and branches upwards. Bootstrap values are indicated at the nodes. The species names are listed on the right side of the tree.

Species names (from top to bottom):

- Puccinia_striiformis*|HM057108
- Puccinia_striiformis*|HM057136
- Puccinia_striiformis*|HM057135
- Puccinia_striiformis*|HM057132
- Puccinia_striiformis*|HM057130
- Puccinia_striiformis*|HM057128
- Puccinia_striiformis*|HM057124
- Puccinia_striiformis*|HM057123
- Puccinia_striiformis*|HM057121
- Puccinia_striiformis*|HM057120
- Puccinia_striiformis*|HM057119
- Puccinia_striiformis*|HM057117
- Puccinia_striiformis*|HM057114
- Puccinia_striiformis*|HM057112
- Puccinia_striiformis*|HM057127
- Puccinia_striiformis*|HM057118
- Puccinia_striiformis*|6d682276c5d782a21f5714e4ce7c835ea
- Puccinia_striiformis*|HM057116
- Puccinia_striiformis*|HM057126
- Puccinia_striiformis*|46f6bcb4c50db360f3a22727cf3242
- Puccinia_striiformis*|3e13ce5d83b162969cea256c8a4bb013
- Puccinia_striiformis*|07eed27dc85e519745652fb39a4a969
- Puccinia_striiformis*|d4285a680f4da9fd091d38ab802fa818
- Puccinia_striiformis*|3380502a35feea8511a827fca374c2e1
- Puccinia_striiformis*|df760f09de210622c4ef75b4018ee92d
- Puccinia_striiformis*|6174fd22bca6e175042ba4843f2ec51d
- Puccinia_striiformis*|419494d97b090bc0be8e0b796e214409
- Puccinia_striiformis*|de0f042250e7d27512999d28f53b9284d
- Puccinia_striiformis*|HM057122
- Puccinia_striiformoides*|HM057109
- Puccinia_striiformoides*|HM057137
- Puccinia_striiformoides*|HM057129
- Puccinia_striiformoides*|HM057111
- Puccinia_striiformoides*|HM057110
- Puccinia_striiformoides*|HM057125
- Puccinia_striiformoides*|c7091caf94a54d33a3dd71c69d2315b2
- Puccinia_pseudostriiformis*|HM057113
- Puccinia_pseudostriiformis*|9204f985d244f0a9021cc8654a3de849
- Puccinia_pseudostriiformis*|HM057134
- Puccinia_pseudostriiformis*|HM057133
- Puccinia_pseudostriiformis*|HM057131
- Puccinia_pseudostriiformis*|793c96e21de83ab2a6a800c4a3501af8
- Puccinia_pseudostriiformis*|be80eceed683393596d09070c44a8d9b3
- Puccinia_pseudostriiformis*|2e3d1808b457dfd648e69106c5c5caff
- Puccinia_pseudostriiformis*|1d860350b60441248666cb4df54b1931
- Puccinia_pseudostriiformis*|MT965634
- Puccinia_pseudostriiformis*|ae65516e8644af6238f5deeab402850f
- Puccinia_coronati*|brevisporal|HM131236

170–220 bp

170–220 bp

170 180 190 200 210 220

270–320 bp

270–320 bp

Sequence logo visualization showing nucleotide conservation across 200 sequences. The x-axis represents positions 270 to 320 bp. The y-axis represents information content. The logo highlights conserved regions, including a highly conserved motif (GAGACTCT) around position 275-285, a run of 10 'A's at position 300, and a conserved motif (CCCAATTAC) around position 305-315. The sequence ends with 'AAT' at position 320.