Isolation and cultivation of blue-stain fungi from the rostrums of wild pigs in south Alabama

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INTRODUCTION

As one of the more damaging invasive species, feral hogs are of particular note to the forestry industry for a variety of reasons. One of those reasons being that they are potential hosts for blue-stain (or ophiostomatoid) fungi which can be detrimental to the value of infected wood due to undesirable discoloration. This research project seeks to identify if the feral hogs are transferring ophiostomatoid fungus to tree roots during the process of rooting.







Fig. 1: A) Wild pig trap at Wyncreek Plantation; B) Wild boar being prepped for processing: C) Rostrum swab

METHODS

Feral hogs are trapped and killed on-site and then sampled by swabbing the nose hairs with sterile Q-tips. Samples are then plated via streaking onto CSMA and SMA and observed for fungal growth at which point the plates containing ophiostomatoid are subcultured.



Fig. 2: Adult boar receiving rostrum swab

PRELIMINARY RESULTS

Results so far indicate a notable presence of ophiostomatoid fungi within the samples collected, particularly from samples plated on SMA.





Fig. 3: Swab-streaked plates displaying ophiostomatoid fungi colonies

FUTURE RESEARCH

As samples are collected, they will continue to be plated and observed for growth of ophiostomatoid species. Once all samples have been isolated and cultivated, pure subcultures will be made for individual species identification.

ACKNOWLEDGEMENTS

Special thanks to Luis Mendez, Mike Raleigh, and Micah Walker for laboratory help. Thank you to The Deer Lab and USDA APHIS for aid in trapping hogs and collecting samples.



