



**CALIFORNIA STATE SCIENCE FAIR  
2010 PROJECT SUMMARY**

<b>Name(s)</b> <b>Paige A. Simons</b>	<b>Project Number</b> <b>J1733</b>
<b>Project Title</b> <b>What Solution Works the Best to Kill Candida albican in the Winter and in Summer?</b>	
<p style="text-align: center;"><b>Abstract</b></p> <p><b>Objectives/Goals</b> The purpose of my project is to compare different types of substances to see what works the best to kill Candida Albican, a type of thrush bacteria, on horse hooves in winter and summer.</p> <p><b>Methods/Materials</b> Put a cup of Water in each spray bottle. Take a bottle of water and put half a cup of Iodine in it. Take the second bottle of water and put half a cup of Bleach in it. Take the third bottle of water and put half a cup of Salt in it. Get the first horse out. Pick out all its hooves. Spray Iodine on the front right hoof. Spray Salt on the back right hoof. Spray Bleach on the back left hoof. Leave the front left hoof alone for the control. Get out the next horses and repeat steps 7-11. Let the hooves sit for four days. Take out the horses. Pick out the their hooves. Take a Q-tip and rub it in the crevasses of the frog in the hooves. Rub the Q-tip on the auger-plate. Tape the auger-plates together at both ends. Place auger plates in a warm, dark cabinet. Let the bacteria on the plates grow for three days. Take out all the plates on the third day. Take tape and top off the plates one at a time. Place clear counting grid over open plate. Count the squares the white bacteria is growing in. Let the hooves from the second testing sit for three days. Repeat steps 14-24. Let hooves from third testing sit for three days. Repeat steps 2 through 12 for final testing. Repeat steps 14 through 24 for the third testing. Repeat steps 14 through 24 for final testing. Materials: 3 spray bottles, 4 cups Iodine, 4 cups Bleach, 4 cups Salt, 8 cups Water, 2 hoof picks, 320 petri dishes w/Sabouraud's Medium, 10 horses, 10 halters, 1 grooming bucket, 1 box of Q-tips.</p> <p><b>Results</b> The results of my investigation on what solution works best on the bacterial levels of Candida Albican in winter and in summer indicates that the control hoof had the least Candida Albican in winter and in summer.</p> <p><b>Conclusions/Discussion</b> After completing my project on what solution works the best on the bacteria levels of Candida Albican in winter and in summer I found my hypothesis was incorrect. My hypothesis stated that saltwater would kill the most Candida Albican bacteria on horse hooves. What I found out when we finished the project was that the control hoof had the least bacteria on it, which means that by not putting anything on horses hooves, they naturally control their own bacteria.</p>	
<b>Summary Statement</b> I tested what solution works the best to kill Candida Albican in the winter and in summer.	
<b>Help Received</b> My parents helped catch, hold ,and handle the horses.	