

Online Training Program for FAMACHA[®] Certification



Use of the FAMACHA[®] system allows small ruminant producers to make deworming decisions based on an estimate of the level of anemia in sheep and goats, which is an indicator of clinical barber pole worm (*Haemonchus contortus*) infection. The barber pole worm is the most economically important parasite affecting sheep and goat production on pasture and the most common cause of anemia during the grazing season in most of the U.S. It has a small “tooth” that lacerates the animal’s stomach (abomasum) wall, and it feeds on the blood that is released. This can result in anemia, (reduction below normal in the number of red cells in the blood) and in severe cases, death.



The FAMACHA[®] card, developed in South Africa, was introduced to the U.S. by the American Consortium for Small Ruminant Parasite Control (www.acsrpc.org). This online training program was developed by Dr. Katherine Petersson and Dr. Anne Zajac, DVM, members of the ACSRPC, as part of a Northeast SARE grant being administered by the University of Rhode Island. The ACSRPC fully endorses the program for those who are unable to attend a workshop.

It is a tool that matches the color of the eye mucous membranes of small ruminants with a laminated color chart showing 5 color categories that correspond to different levels of anemia. Category 1 represents “not anemic” with category 5 representing “severely anemic.” The FAMACHA[®] system uses the scores determined with the card to identify and selectively deworm sheep and goats with anemia. Selective deworming minimizes drug use and slows the rate of development of drug resistant parasite populations including barber pole worm and other GIN parasites. It can also aid in selective breeding decisions by identifying those animals that are most susceptible to haemonchosis.

Online FAMACHA[®] certification can be obtained through a 4-step process. You must be 13 years of age or older to participate. Please read through all of the instructions before starting this online training program and then begin with Step 1.

If you are interested in leading a group of participants through this training program, please give project staff at least one month's notice to coordinate. It is also required that the group facilitator or class teacher complete this online training program prior to leading the class.

1. View the 2 hour video on Integrated Parasite Control and the 30 minute video, *Why and How To Do FAMACHA[®] Scoring*. Visit our website, <http://web.uri.edu/sheepngoat/video> to access these videos. The videos can be viewed in sections at your own pace. Complete an online post-video summary (administered through Qualtrics). Email project staff (see last page for contact information) to obtain the link to the summary and state that you have watched both of the required videos. Project staff will review responses to the online post-video summary and follow up with participants.
2. Practice the COVER, PUSH, PULL, POP! technique demonstrated in the online video, *Why and How To Do FAMACHA[®] Scoring*. This technique allows you to correctly use your FAMACHA[®] card for anemia scoring. To mimic a FAMACHA[®] card, cut an index card or other stiff paper or cardboard to 3.5 X 4.5 inches. Using a red marker, draw a thick (1/2 inch) red line on the long side of the card.
3. Make and send us a video demonstrating your mastery of the COVER, PUSH, PULL, POP! technique following the detailed instructions below. If the video is too large to email, project staff can set up a temporary share folder in Google Drive for you to upload it. If you have your own cloud drive, you can also share a link to your video file with our email address to provide access. Uploading the video to a cloud drive does help to preserve overall video quality. Project staff do need to have the video file for our records.
 - You will need help making the video, so enlist friends or family members. It is okay to have help restraining the animals and/or holding the index card.
 - To start – **introduce yourself** to us by stating your name, date and that you are demonstrating the proper handling of the animals for FAMACHA[®] scoring.
 - Demonstrate the correct procedure on a sheep or goat. Make sure that you zoom in to provide a clear, steady, easy to see close-up of the COVER, PUSH, PULL, POP! technique on both eyes using proper positioning and using your thumbs. Proper exposure of the eye mucous membranes must be evident from the video. An easy way to tell if you are using enough pressure when you COVER and PUSH down on the eyeball is when the eyelashes curl up over your thumb.
 - Hold the card next to the mucous membranes and state whether the color is darker than, lighter than or the same color as the red line on your card.
 - Be sure to demonstrate the technique in natural light and be careful that you do not

shade the eyes with your body while exposing the membranes. **Remember to do both eyes.**

- **Repeat the procedure on a second sheep or goat.**

4. Project staff will follow up through email, as needed, to ensure proper technique and learning.

Upon completing the 4-step online training program listed above, the participant will receive a Certificate of Competence in the use of the FAMACHA[®] anemia scoring system. The certificate will enable participants to purchase a FAMACHA[®] card through the University of Rhode Island. The price of the FAMACHA[®] card is subject to change. Details will be provided upon completion of this online training program or email project staff for more information.

Visit our website for additional information, resources and programs including workshops and events on integrated small ruminant parasite control at <http://web.uri.edu/sheepngoat>.

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