Gastrointestinal nematode (GIN) parasites and their life cycle.
Smart dewormer use.
Integrated parasite control practices including:
- Pasture and grazing management practices
- The FAMACHA® System
- Fecal Egg Counting
- Selective breeding for resistance to GIN parasites
Use of estimated breeding values (EBV) for genetic improvement through participation in the National Sheep Improvement Program (NSIP).
Research on efficacy of a cranberry vine feed supplement as an alternative dewormer.

For more information on how to participate
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Rusty Burgett, Program Director, NSIP
Reid Redden, Chairman of the Board, NSIP
Melanie Barkley, M.Ed., Extension Educator Penn State University, speaker and NSIP member
Tom Murphy, PhD, Research Geneticist
USDA Agricultural Research Service; Development of a NSIP FAMACHA® EVB and multi-trait, pasture-based selection index that includes GIN resistance and other economically important traits.

For More Information:
http://web.uri.edu/sheepngoat

View our online videos & other resources

LEARN MORE ABOUT

BUILDING ON SUCCESS
Expanding opportunities for sustainable management of small ruminant gastrointestinal parasites

PROJECT PARTNERS

This work is supported by the USDA National Institute of Food and Agriculture (NIFA) Northeast Sustainable Agriculture Research and Education Program Project LNE19-381 and USDA NIFA Animal Health and Disease Research Project 1007290.

Brochure developed November 2019
Gastrointestinal nematodes (GIN), especially the barber pole worm (*Haemonchus contortus*), are one of the top health concerns of sheep and goat producers in the northeast. GIN parasites are a primary concern when raising sheep and goats on pasture and can cause poor growth, anemia, and death in severe infections.

Effective tools for integrated small ruminant parasite control exist, however, the challenge is making these techniques widely available.

Additionally, when other management strategies fail to alleviate GIN infection in susceptible animals, producers have few options for the use of alternative and effective dewormers. With parasite resistance to all classes of dewormers rapidly developing, this situation is not sustainable.

Finally, the long-term value of genetic selection for parasite resistance is undervalued and underutilized by small ruminant producers in the northeast, translating into a lack of genetically resistant breeding stock available for replacement animals.

This three year project will continue a successful Online FAMACHA® Certification program with updated and condensed informational videos, and a Spanish language version. A group facilitated class format will also be developed to further assist under-served audiences with technology challenges and that prefer group workshop learning.

Workshops with a focus on selective breeding through the use of estimated breeding values (EBV) for parasite resistance and the benefits of enrolling in the National Sheep Improvement Program (NSIP) will continue along with project-supported fecal egg count analysis. A new FAMACHA® EBV and pasture-based, multi-trait selection index that includes GIN resistance and other economically important traits will also be developed and utilized.

This project will continue to research and evaluate the anti-parasitic effects of a cranberry vine (CV) feed supplement on GIN infection in ewes during late gestation through early lactation. CV contains condensed tannins, also called proanthocyanidins (PAC) and has demonstrated anti-parasitic efficacy in previous Northeast SARE Projects (LNE10-300 and LNE15-342).

Cranberry bog prunings provide an abundant, economical source of CV. Photo courtesy of Carly Barone, University of Rhode Island.

Effective tools for integrated small ruminant parasite control exist, however, the challenge is making these techniques widely available.

Online Training Resources:
- Visit our website, [http://web.uri.edu/sheepngoat](http://web.uri.edu/sheepngoat) to view resources including videos & factsheets on Integrated Parasite Control, FAMACHA® Scoring, and Fecal Egg Counts. A Spanish language version will also be available soon!
- Online FAMACHA® certification can be obtained through a 4-step process:
  1. View 2 required informational videos on Integrated Parasite Control & FAMACHA® scoring and complete an online post-video summary.
  2. Practice the Cover, Push, Pull, POP! technique.
  3. Record and send a video performing the FAMACHA® scoring technique.
  4. Follow up with project staff through email to ensure learning and proper technique.
- Regional workshops on integrated parasite control/FAMACHA® training available upon request.

Focus on selective breeding—NSIP and Northeast producers:
- Attend an NSIP workshop and learn more about enrollment benefits, estimated breeding values (EBV) and a multi-trait selection index that includes resistance to GIN parasites.
- Receive assistance in identifying the most parasite resistant replacement animals through fecal egg count (FEC) analysis combined with FAMACHA® scores.
- NSIP Seedstock producers—new and existing: Receive assistance with enrollment (new members), support for FEC analysis, and generate FEC, FAMACHA® and other economically important EBVs for superior production traits.

Take an online survey of existing parasite control practices:
- Visit our website for a link to this anonymous survey for continued needs assessment.

Project duration:
May 2019—October 2022