**EQUIPMENT FOR SALE**

1978 GMC 1 ton, 350, 4 barrel, 11-ft. Badger flatbed..................$2500
1999 Chevrolet Cheyenne regular cab pickup, 4x4, VG, automatic, air conditioning...............$2500

Call home 406-627-2202 or cell 406-289-0018, Ledger, MT

---

**TRADER’S DISPATCH, October 2018 — Page C18**

**STOKES FENCING**

(406) 450-2149

Fencing Done Right

Barbed • Smooth • Woven • Electric • Jack Leg
Continuous Panels • Pipe • Corrals • Windbreaks • Rails • Erosion Control

Licensed • Bonded • Insured

---

**EQUIPMENT FOR SALE**

---

**SY Monument**

20 ton tilt bed, 30-ft. x 100", hydraulic lift and tail, tandem duals, 17.5 tires, factory electronic brakes, tow nice.............$10,500

---

**Cahill Seeds**

406-783-5510
Scobey, Montana
charlie@cahillseeds.com

**WINTER WHEAT**

- **SY 517 CL2** - New AP 503CL
- **Brawl** - Clearfield with Yield
- **WB Matlock** - Jerry that Stands
- **SY Monument** - New Top Yielder
- **Willow Creek** - For Forage

---

**ITEMS FOR SALE**

- **1995 Ford F600 service truck 8.3 Cummins, Allison, 3906 transmis-**
  
  sion, PTO and pump, 5000# IMT crane with remote, air brakes, 11.7 body, 70% tires, pintle hitch with**
  
  electric brake control...............$13,500

- **1999 Ford F5300 XLT 4x4, loaded**
  
  hauler, RV bed, 13.2 Power Stroke diesel, automatic, performance transmis-
  
  sion, custom bumper, low miles, runs good, clean..................$23,000

- **1989 Oakeshell 6x6, chassis only, 290**
  
  Big Cam Cummins, 6L transmission. Runs good, great for water truck, etc., $15,000 obo

- **1995 International 9400 semi tan-
  
  dem axle, 72" pro sleeper, loaded, 500 hp, N14, pre-emission and e-log,**
  
  Jake, Super 10 speed RV hauler bed and 6ft wheel plate. Runs good, 50%**
  
  tires, custom bed and bumper etc...........................$15,000

- **1999 Ford F550 XL 4x4, loaded**
  
  hauler, RV bed, 13.2 Power Stroke diesel, automatic, performance transmis-
  
  sion, custom bumper, low miles, runs good, clean..................$23,000

- **2000 Flat Allis 945B wheel loader, 7 yard**
  
  bucket. Runs good, needs transmission work comes with spare parts and**
  
  tires..................................$8500 obo

- **Skytrak 9308 Telehandler 4x4x4, 9000 lb lift, 38 ft,**
  
  lift height, turbo diesel, bucket and forks. Runs good, some leaks, 1st gear strong, $14,500

---

**PLAN(T) YOUR SUCCESS**

*You CAN afford High Quality Seed, *

*You CANNOT afford low yields*

---

**CONTINUED ON PAGE C20**

---

**Southern cowpea weevil appears as a new pest on pulse crops**

By Gadi V.P. Reddy, Anamika Sharma and Govinda Shrestha, Montana State University, Western Triangle Agricultural Research Center, Conrad, Montana

---

**Temperature and humidity greatly influence the development and survival of these weevils. The favorable temperature for this insect to complete all life stages ranges from 93°F to 100°F. A personal communication with Dr. Sanford Eigenbrode (University of Idaho) indicates that there are least chances of overwintering of this weevil in Montana and Idaho due to less tolerance of eggs and larval stages to low temperatures of Montana climate. For example, 14°F can kill the larval stages to low temperatures of Montana climate, it is distributed around the globe (since 2015). Although Southern cowpea weevil is a wide host range including peas, chickpea, pigeon pea, garden peas, cowpeas, mung beans, black-eyed peas, soybeans, Lima beans, lentils, and wild legumes. However, there are many species of Callosobruchus that have been attacking pulses in different parts of the world but one of the most common ones is Southern cowpea weevil. It has a wide host range including peas, chickpea, pigeon pea, garden peas, cowpeas, mung beans, black-eyed peas, soybeans, Lima beans, lentils, and wild legumes. However, Southern cowpea weevil is mainly considered an economically important pest in cowpea, lentils, green gram and black grain worldwide. In Montana, this weevil has been confirmed by entomologists from lentil shipping containers in the last few years (since 2015). Although Southern cowpea weevil is a major pest in the tropical climate, it is distributed around the globe comprising Asia, Africa, Canada, South America, and Australia. It is known to be more common in Southern United States. Transportation often plays an important role in the movement of this pest. Adult Southern cowpea weevil is about 4mm (0.16 inch) in length and have long antennae, legs, and wings. They are usually brownish in color but some adults may look greenish brown (Figure-1). For their defensive purposes, adults “play dead” when disturbed and resume their movement after 5–10 min. This is also most common feature in many other beetles and weevils’ species. It is an internal feeder and if the seeds are stored in a warm, humid place, life cycle will be completed in about 20–23 days. Female adults lay and glue eggs on seed surface of host plants. The flat bases of translucent eggs help them to remain stuck to the surface of the seeds. They can lay as many as 90 eggs during their lifetime. At optimum temperature of 90–95°F, eggs hatch in 5–6 days and the first instar larva then burrows deep into the seed through the base of the seed. All larval stages complete within the single seed, where they go on hidden and sheltered as they feed. The final instar larva pupates within the seed. Soon after emergence from the pupa, the adult crushes its way out of the seed, leaving a distinctively curved exit hole in the seed’s casing. Adults live for a short period of time (about two weeks) and known as very fast fliers and fast runners. The feeding damage and adult exiting holes cause a reduction in germination and poor market value of pulses.

---

**Figure-1: Life stages of Southern cowpea weevil (Callosobruchus chinensis).**

Photos courtesy of: https://en.wikipedia.org/wiki/Callosobruchus_chinensis; http://agritech.tnau.ac.in/crop_pro-

tection/crop_prot_crop_sto_insect_primary_pest_5.html; https://www.beanbeetles.org/handbook/
Southern cowpea weevil appears as a new pest on pulse crops

CONTINUED FROM PAGE C18

practices for its management. Moreover, drying and heating can be used to manage an infestation of seeds without affecting seed germination. As the biological control, some less explored egg (Uscana lariophaga), larval and pupal parasitoid (Dinarmus basalis) are also known.

Several behavioral aspects of Southern cowpea weevil matches with the pea weevil such as the timing of emergence, egg laying on the presence of exit holes on peas hence it is easy to get confused among both the insects. Nevertheless, Southern cowpea weevil can be distinguished from pea weevil by the presence of very long legs and antennae and also by its vast host range. Pea weevil is host specific to peas whereas Southern cowpea weevil can infest several legumes as listed above.

Management of Southern cowpea weevil is challenging due to difficult monitoring of eggs and development of larvae within the seeds. In the early stages of infestation this insect can go unnoticed, and only after the presence of exit holes its presence can be identified, hence a vigilant attitude will be necessary to keep this insect under control in Montana.

If somebody notices any damage to seeds and presence of exit holes on any legumes please contact Entomology/Insect Ecology team members via phone, 406-278-7707 or email, reddy@montana.edu.

Southern cowpea weevil appears as a new pest on pulse crops

CONTINUED FROM PAGE C18

Moldy Cheese Day

Date When Celebrated: Always October 9

Moldy Cheese Day is today. Do you have any moldy cheese in your refrigerator? Do you need to have moldy cheese to celebrate this day? And, if you have any moldy cheese, what would you do with it today?

Every once in a while, we come across a special day that has no apparent rhyme or reason. Today is one of those days. But, that doesn’t mean you shouldn’t celebrate this wonderful (?) and special holiday. Au contraire...... scour through the refrigerators at home and work today for moldy cheese. Office refrigerators are a great place to find moldy stuff. See if that moldy piece of cheese is salvageable. And, just enjoy the day.

If you find moldy cheese, take a slice off each side. The insides should still be good.

Did you Know? Mold is common in cheese. Its part of what gives a particular cheese flavor and character. For example, the blue stuff in Bleu Cheese is mold.