

Farm



Sense

July 2021

UAPB Small Farm Project

Dates to Remember

July 12-Aug. 20 – FSA accepting applications for CRP Grasslands Program.

July 15 – Deadline to submit Crop Acreage Reports to FSA.

July 23 – Deadline to apply for the General Conservation Reserve Program (CRP).

July 29 – Beginning Farmer and Heir Property Zoom meeting, 10 a.m.-11 a.m., Code: 439140980#. Call local FSA office for more information.

Aug. 26 – Safety Net Programs and Disaster Programs Zoom meeting, 10 a.m.-11 a.m., Agriculture Risk Coverage – County (ARC-CO), Price Loss Coverage (PLC), Livestock Indemnity Program (LIP), Non-insured Crop Assistance Program (NAP), Code: 388460076#. Call local FSA office for more information.

Aug. 31-Sept. 1 – Sustainable Forestry Landowners and Ranchers Zoom Conference. Contact Kandi Williams at williamska@uapb.edu or Karen Lee at leek@uapb.edu for more info. Link not available at press time. Sponsored by UAPB and Prairie View A&M.

Sept. 16 – Youth Loans Zoom meeting, 10 a.m.-11 a.m., Code: 6260612#. Call local FSA office for more information.

Start Clean, Stay Clean with a Pre-emergence Herbicide

By Dr. Henry English, Director, UAPB Small Farm Program

Starting clean (free from living weeds) and staying clean are crucial to a successful farming operation. Before planting, fields should be free of live weeds growth unless planting into a green cover crop.

Starting clean can be accomplished with tillage or a burndown herbicide. A spring burndown program in corn and soybeans provides effective weed control to prepare for planting and helps decrease the seed bank during the season. But adding a pre-emergence residual herbicide keeps yield-robbing weeds from competing with young crops for water, light and nutrients.

Profitable crop production normally starts with a pre-emergence soil-applied herbicide program. The

pre-emergence (residual) herbicide helps farmers maintain their fields weed-free during the initial establishment (3 or 4 weeks) of the crop. It also reduces the weed selection pressure and helps to prevent herbicide resistance (due to fewer weeds to be controlled) by the post-emergence herbicides that are applied later. A pre-emergence herbicide can also protect against early weed competition when weather or busy schedules prohibit timely post-emergence applications.

Pre-emergence herbicides are not perfect. They generally require 0.5 to 1.0 inches of precipitation within seven to 10 days of application for optimal incorporation. Most pre-emergence herbicides can be applied before or up to three days after planting. If there are established weeds at the time of pre-emergence application, it is important to have an effective burndown in the tank mix.

A pre-emergence herbicide containing two or more effective modes of action (MOA) will likely provide control of a wider range of weed species when compared to the use of a single MOA. Some examples of pre-emergence herbicides include Dual Magnum, Strategy, Curbit, Sandea, Pursuit, Treflan, Valor, Warrant, Command, Authority Elite, Authority MTZ, Prefix, Sharpen and Boundary.



Weedy area is where no pre-emergence herbicides were used.



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Check Your Bull's Fertility before Breeding Season Starts

By Dr. David Fernandez, Extension Livestock Specialist, UAPB

June is the beginning of the breeding season for most beef producers. Before turning your bull out with the cows, have your veterinarian conduct a breeding soundness exam. A breeding soundness exam typically includes a general exam that evaluates the bull's feet and legs, eyes, mouth, teeth and body condition. The vet will also examine the bull for any injuries that may prevent him from breeding.

Next, the veterinarian will measure the bull's scrotal circumference and tone. Bulls with especially soft or hard testes may have suffered an injury or infection that reduces fertility. Bulls with larger scrotal circumferences are more fertile and have daughters that are more fertile and mature earlier. The vet will also collect a semen sample and determine the percentage of motile sperm and normal sperm.

A bull must have at least 30% motile sperm with at least 70% normal sperm with a minimum scrotal circumference to be classified as a sound breeding bull. If your bull does not meet these criteria, have him tested again in 30 days. Roughly 10% to 20% of bulls fail a bull fertility test in a given year. Breeding soundness exams should be conducted every year before the breeding season.

If the bull fails a fertility test, do not sell him to another beef producer. The bull is infertile and may not produce any calves for the buyer causing him or her a tremendous financial loss.

I participated in a breeding soundness exam clinic some years ago where a producer brought five bulls to be tested. Only the youngest, smallest bull passed the exam. He would probably not been able to breed any



A sound breeding bull. Breeding soundness tests should be conducted before every breeding season.

of the cows that year while the other four infertile bulls would have done all of the 'breeding'. Because of the results of the breeding soundness exam, the infertile bulls were culled, and the producer went on to have a successful breeding season instead of the disaster that could have occurred. For just about \$50 per head, they saved their entire calf crop.

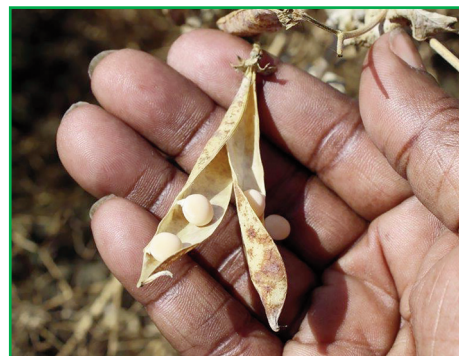
Could Yellow Field Peas Be An Alternative Crop for Small Farmers?

By Dr. Henry English, Director, Small Farm Program, UAPB

On June 3, the UAPB Small Farm staff went to Lake View, Arkansas, to see a field of yellow field peas a farmer was growing for the Puris Company. To our surprise, the peas were not a new variety of the Southern pea; they were English peas or snow peas.

Yields from these dry yellow field peas are estimated to be 40 to 60 bushels per acre, and the estimated price per bushel is \$7. Therefore, for a 50 bushel per acre crop, a farmer would get \$350 per acre. Estimated expenses are seeds, \$55; chemicals, \$25; and fungicide, \$13 per acre. The cost is somewhat like soybeans.

The yellow field pea is a cool season crop unlike the Southern pea which is a warm season crop. The yellow field pea was planted in March and scheduled for harvest the second week of June. Soybeans were scheduled to be planted after the yellow field peas. Consequently, two crops,



The Puris Company sends a truck to pick up the crop so farmers should plan on planting a minimum of 30 acres of peas, the quantity required to fill a truck.

and possibly three, another fall crop of yellow peas could be planted. However, the need for crop rotation would likely prevent a third crop from being planted.

The yellow field peas were planted on a silt loam soil with good drainage. The crop was drilled and planted at about 180 pounds per acre. Only a pre-emergence residual herbi-

cide was used. A burndown herbicide was mixed with the residual herbicide for weed control. Planting dates can be as early as Feb. 1, and the peas can start growing at 36 F. The peas may need a fungicide in some years. The variety used in Arkansas is a 90-day variety.

The Puris Company provides the seed and buys the crop. It has a financial section that provides funding for the chemicals, fungicide and seed. Payment is due after harvest. Puris also provides crop insurance. Since the company sends a truck to pick up the crop, a minimum of 30 acres is required to fill a truck. The crop is used to add protein to about 200 products such as drinks, soups and gummies.

Yellow field peas could be an alternative crop for small farmers. For more information on yellow field peas, contact UAPB at (870) 575-7225.

Summer Pond Maintenance

By Scott Jones, Small Impoundment Extension Specialist/Instructor, UAPB, and AFS Certified Fisheries Professional

The most frequent problem pond owners face in summer is aquatic vegetation. While plants are valuable to pond ecosystems, small ponds are especially vulnerable to excessive plant growth due to a higher ratio of shallow water to deep compared to larger ponds. The first step to managing a problem plant is correct identification. Handy DIY identification

resources can be found at Texas A&M AgriLife Extension's webpage "AquaPlant"

<https://aquaplant.tamu.edu/> and at the University of Florida Institute of Food and Agricultural Science's Center for Aquatic and Invasive Plants website <https://plants.ifas.ufl.edu/>.

Once the plants are identified, you can refer to the MP556 – *Aquatic*

Vegetation Control in Arkansas fact sheet for guidance on selecting which techniques are appropriate for your situation. This fact sheet and many more can be found by searching their name or number at the University of Arkansas Division of Agriculture Cooperative Extension Service "Publications" webpage at <https://www.uaex.edu/publications/>. Or you can contact your county Cooperative Extension Office for guidance.

Fish harvest is another important part of pond management. Ponds and lakes can only support so many fish. Harvesting some helps keep the population below its maximum sustainable yield which allows the fish that aren't harvested to grow larger and faster. Most ponds in Arkansas can support 10-15 pounds per acre per year of largemouth bass harvest, and 40-50 pounds per acre per year of bluegill harvest. Since channel catfish tend to not reproduce effectively in typical ponds, harvest them as you please and restock at 50-100 adults per acre when catch rates get low. Crappie and other species are so variable and/or unpredictable that no general harvest rates are widely accepted. University of Arkansas at Pine Bluff Extension Fisheries Specialists¹ and Arkansas Game and Fish Commission Fisheries Biologists² can provide guidance on fish assessment and management.

¹http://www.uapb.edu/academics/school_of_agriculture_fisheries_and_human_sciences/aquaculture_fisheries/people.aspx

²<https://www.agfc.com/en/about-agfc/contact-agfc/>



Watershield grows along the edge of a farm pond.



Bluegill grow exceptionally well when fed a floating feed. Catfish, minnows and even grass carp will readily eat fish feed along with bluegill.

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Consider Swarming Bees “Friendly”

By Dr. Yong Park, Associate Professor, UAPB

What do you see every spring? Swarming honey bees (*Apis mellifera*). Humans have had a long relationship with the honey bee. Although the honey bee means European honey bee, in the United States, there are various types of the honey bee. Many people recognize that they may have trouble with the honey bee during spring. In Arkansas there will be a swarm from the honey bee hive. If you know what the swarm is, you should not panic when your backyard or street has tons of honey bees.

Swarming is natural process of a honey bee’s colony reproduction. When a honey bee colony has successfully over-wintered, it starts to make one or more new queen bees in the colony. An over-wintered queen is preparing to leave the colony with half of the honey bees before new virgin queen bee is ready to emerge. It may be close to 20,000 or 30,000 honey bees with a previous queen bee between mid-March and mid-June.

The swarm generally occurs on sunny, warm and calm days between 10 a.m. and 5 p.m. They swirl in the air. The sky may seem covered with bees until the queen lands on an object such as a tree, fence or anywhere else. The swarm looks like a round ball hanging on the tree. The bees may stay there between 20 minutes and a couple of hours. On exception, they may stay several days if weather conditions dramatically change such as lower temperatures or raining. However, they will leave the location as soon as scout bees find a decent place to make new nest such as a tree crevice or house wall.

The swarm may be a terrifying sight if the general public does not understand it. In general, honey bees in a swarm are gentle. Understand they are not going to sting you because their honey crop (similar to human’s stomach) is filled with honey. They do not want to bend their abdomen to sting us. Therefore, they



Swarming bees will not sting you because their honey crop (similar to a human’s stomach) is filled with honey.

can be handled with ease.

Remember that the swarms are temporary and occur during the spring. The presence of the swarm is both good and bad news because bees provide many more benefits than threats to us. If you see a swarm, call Dr. Yong (Young) Park, UAPB Department of Agriculture, at 630-388-9483.

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