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LEE COUNTY
SOUTHWEST FLORIDA

Agri-link

Upcoming Seminars and workshops

- SW Florida Garden and Landscape Conference, FCCU Campus, February 10 , 2007
- Florida Master Naturalist Training, Freshwater Module, Friday, Feb. 23 through every Friday in March, 2007.

Issue 4
Dec 06-Feb 07

Inside this issue:

Fuel Farming in Lee County - The Future is Now

"The use of Vegetable oils (Bio-Diesel) for engines may seem insignificant today, But such oils may become in course of time as important as petroleum and coal tar products of the present time" - ***Rudolf Diesel, 1912. Inventor of the Diesel engine).***

Rudolf Diesel's first engine ran on peanut oil at the World Exhibition in Paris in 1900, much to the astonishment of scientists and engineers. Even then, this visionary could see the advantages in agriculture and for the environment.

Alternative Fuels Sources

Despite the phenomenal work done by Diesel, one hundred and six years later, largely driven by the relatively cheap prices of fossil fuel oils mainly from the Middle East, the wealthiest countries in the world have not established the means to produce non-edible vegetable oils in large amounts to impact change.

Bio-diesel

The term bio-diesel is used to define oils which are extracted from vegetable seeds to produce the energy source for electrical power. These vegetable oils can be used in most diesel engines with no major modifications, although they are more commonly blended with petroleum diesel to create a bio-diesel blend.

While peanut and soybean oils can be used for bio-fuel production, there is conflict arising from their alternative use for food.

Energy Planners Identify ideal Plant

Energy Planners in Lee County have identified a plant with a tremendous potential for bio-diesel production. The plant is *Jatropha curcas* (Physic nut), and already, this is being cultivated in large acreages in countries such as India who have their sights on cornering the bio-diesel market should there be an increase in fossil fuel prices, or worse, a decline in the supply of crude from OPEC oil producers.

Advantages of Jatropha Curcas

Jatropha curcas is a oil seed crop with excellent potential for production in Southwest Florida. The low cost seeds have a high oil content, the plants grow on both good and degraded soils, performs well in low and high rainfall areas and the plant size makes collection of seeds convenient.

Jatropha oil is non-edible, it does not compete with food crops, and does not

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A fuel farm in India

FROM THE AGENT'S DESK...

Roy Beckford—*Ag & Natural Resources Agent*

Dear Reader,

By the time the next agriculture census is done, I believe that more farms will be recorded in Lee county than before. This is because small farming ventures are replacing larger farms.
This is being driven by the need of certain consumers to know where their foods are grown, to grow it themselves, and for supplying the ever-increasing niche markets for various types of produce.
Great opportunities exist for goats, specialty vegetables, and organic products.
I welcome and await your contact should you decide to take advantage of this new trend in agri-business.

Sincerely,
Roy. .....

Fuel Farming—*continued*

require extensive cultivation methods, fertilization and irrigation. After oil pressing there is a residual nitrogen-rich presscake for a secondary market (livestock feeds) as well as other by-products. One such by-product is glycerin from

Green Jatropha curcas nuts

which hydrogen may be harvested for use in energy cells.
After the shrub is established (18 months) expected yield, in U.S. gallons, at about 1000 plants per acre (about 1 plant per 2 sq yards or so) is 1000 gallons of oil per year. This is equivalent to 1 gallon of oil per shrub per year.
Farmers trying to recover from the effects of citrus canker may find this alternative a very viable option. The ability of the

Expected yield per acre is 1000 gallons of oil per year.

plant to do well in sandy soils also presents the opportunity for landowners with property unsuitable for traditional agriculture to exploit this new crop.
Plans are already in place to build a bio-diesel refinery in Lee County in the near future, and this will spell the beginning of a new, profitable farming venture.
Fuel farming is a viable agricultural enterprise just waiting to be exploited.

Jatropha growing at ECHO in North Fort Myers

Understanding Agricultural Classification

Persons interested in small scale farming ventures may benefit from having their property appraised for Agricultural classification or Agricultural Exemption as most refer to the measure. Classification is done on the recommendations of the Agriculture Appraiser in the County Property Appraiser's Office.
An agricultural classification is the designation of land by the Agriculture Appraiser, in which the assessment is based on the agricultural income use value. To qualify for Agricultural classification, the land must be used as a bona-fide Agricultural operation on January 1st of the tax year you are seeking to apply for. Further, a return must be filed with the Property Appraiser's office between January 1st and March 1st of the tax year.
Only the land that is used for a bona fide agricultural purpose shall be classified agricultural. This means that any portion on which a residential unit sits, or any portion which will not be part of the agricultural activity, will be exempt from the classification. Put simply, "Bona-Fide Agricultural Purposes" means good faith commercial agricultural use of the land.
There is a wide range of agricultural enterprises which may be considered when one makes an application for Agricultural Classification. The Property Appraisers office sets reasonable minimum limits on per head or per acreage on animal or crop activity. This is done to ensure that "Bona Fide Agricultural Activities" are being carried out using acceptable standards and practices, and applicants are not simply looking to abuse the system.
Here is a condensed list with minimum land/activity ratios recommended by the Agriculture Appraiser's Office.
Citrus - Minimum of 5 acres
Pasture land – Minimum of 10 acres
Goats – 15 heads on minimum of 2 acres
Apiaries (bees) – A honey extraction house is required in addition to beehives
Aquaculture (fish or shrimp farm) – 1 acre
Horses – 4 breeding or boarding horses
Other Classifications – Handled on a case-by-case basis.

For more information or clarification on Agricultural Classification, contact the Agricultural Appraiser at 239-533-6172, or Web address at: ww.leepa.org under the Agriculture Department.

Farmers' Safety Box

Pesticide alternatives

Home made, organic mixtures can kill or ward off insects. Here are two suggestions.

<u>To make a soap spray:</u>
1 tablespoon dishwashing soap in 1gallon of water. Test spray a few leaves of the affected plant; if no damage results, spray the whole plant.

<u>To make an ammonia spray:</u>
Mix 1 part household ammonia with 7 parts water.
Test as above and apply as needed.

Understanding Florida's Snakes—the Southern Black Racer

Snakes evoke fear in many people, but there are several species in Florida that are harmless, non-venomous and actually provide a beneficial service by controlling many vertebrate and invertebrate pests.

One such snake is the Southern Black Racer which is found throughout Florida and as far south as the Florida Keys. It is one of the most commonly seen snakes in urban settings, perhaps because they will pursue prey right into our neighborhoods.

The adult Black Racer ranges in size from 20 to 56 inches in length. It is generally black in color with white markings on the chin and throat, and usually a grayish to black belly.

Although they are quite harmless, Black Racers will readily bite to defend themselves when cornered, but in most instances they are very swift to evade the possibility of confrontation.

Racers are opportunistic predators. Frogs, mice and rats, lizards and small snakes make up their diet. It overpowers its prey by grabbing it in its jaws and pressing it against the ground until it stops struggling.

Find out more about Florida snakes at the '**Online Guide to Snakes of Florida**' http://www.flmnh.ufl.edu/herpetology/FL-GUIDE/onlineguide.htm

Best Management Practices (BMP's) - What's the story?

What are BMP's?

Best Management Practices or BMP's are a practice or combination of voluntary practices adopted by a farmer or landowner as determined by the coordinating agencies, based on research, field-testing, and expert review, to be the most effective and practicable on-location means, including economic and technological considerations, for improving water quality in agricultural and urban discharges. They cover four major areas, which overlap. These are **Nutrient Management**, or how producers use fertilizers, **Pest Management**, or how they use pesticides, **Water Management**, or how they use and discard water, **Sediment Management**, or how they affect the sediments on and around their property.

Why should BMP's be adopted?

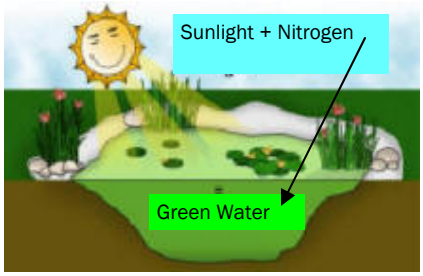
Whether you own a stormwater pond, live on a canal, own a farm, have a lush green lawn or grow fruit trees, BMP's apply to you and will have a positive environmental impact once adopted.

Complying with BMP's voluntarily is easier than dealing with regulations now or in the future.

In Florida, producers who voluntarily apply BMP's will receive a "presumption of compliance" with state water quality standards. This enables the receipt of cost-share money to assist with making the necessary structural or non-structural changes on their property. For those concerned about the release of harmful nutrients and pollutants into groundwater supplies and the effects of fertilizer and nutrient releases on algae blooms in ponds, lakes and ocean waters, the best solution is the adoption of BMP's.

For more information on Best Management Practices, call the Extension office or visit the BMP website at: **http://solutionsforyourlife.ufl.edu/hot_topics/agriculture/bmps.html**

Managing Stormwater Ponds



Each year, tons of fertilizer is used to fertilize lawns and plants in our county. When it rains, excess fertilizer nutrients such as nitrates and phosphates run off with storm water into ponds or receptacles designed to collect runoff from yards, roads and other structures.

Stormwater ponds are meant to filter out pollutants and excess nutrients before the water they contain enters ground water supplies (wells and aquifers). Naturally, excess nutrients build up in these ponds and invite the rapid growth and development of simple organisms called algae which feed and thrive on the available nutrients. The mass proliferation of algae in stormwater ponds turns it green, because this is the color of the photosynthesizing organisms. This 'greening' of the pond is called an algae bloom.

Algae blooms can be minimized or prevented by planting native aquatic plants in the littoral zone or shoreline of the pond or lake. In adequate numbers, these plants will utilize the available nutrients and make less of it available to algae. In addition to this very important function, aquatic plants add beauty to the pond, improves the esthetic value of the overall landscape, and attracts native wildlife and birds.

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FARM JOKES

Sheep Fries

There was once a sheep farmer who had a French farmhand working with him to help castrate his sheep. As the farmer castrated the sheep, the French farmhand took the parts and was about to throw them into the trash.
"No!" yelled the farmer, "Don't throw those away! My wife fries them up and we eat them, they're delicious! They're called Sheep Fries!"

The farmhand saved the parts and took them to the farmer's wife who cooked them up for supper. This went on for three days . . . and each evening they had Sheep Fries for supper.

On the fourth night the farmer came in to the house for supper. He asked his wife where the farmhand was and she replied, "It's the strangest thing! When he came in and asked what was for supper, I told him French Fries and he ran like crazy!"

Tid-bit News

Cost Share Assistance to Growers

The Natural Resource Conservation Service (NRCS) is offering a new cost share initiative for windbreaks to assist growers with the control of windborne diseases. NRCS may be able to provide up to 75% of the cost share for windbreaks.
The following list of species will be supported by the program:
Bamboo, Red Cedar, Crepe and Wax Myrtle, Eucalyptus, Slash and Sand Pine, Simpson's Stopper, Silly Oak , Saw palmetto and Walter's and Sweet Viburnum.
Interested persons should call Conservationist Kendal Hicks 239-997-5678 #3.
The local NRCS Office is located at 3434 Hancock Bridge Parkway, Suite 209B, North Fort Myers, FL 33903.

Land for lease or rent

- 10 acres suitable for cattle ranching, goat farming or other agricultural venture.

  Located on Burnstore Road in Cape Coral.

  Call John Kolb at 561-222-5153 or contact Roy Beckford at Lee County Extension

- 6 acres suitable for goats, vegetables or fuel crop farming.

  Located on Tina's Lane off Wildcat Drive

  Call Verdelle Jahn at 239-481-7478 or contact Roy Beckford at Lee County Extension

Extension Impact

On November 20, 2006, the Lee County Agriculture and Nature Resources Program hosted Sarasota, Venice and Fort Myers Master Gardeners at ECHO International in North Fort Myers. The field day event comprised of a tour of the ECHO farm, tropical fruits and vegetable production classes, as well as a visit to Ken Ryan's vegetable farm.
Master Gardeners learned about crop production systems around the world and in various climatic and geographic zones, and they gained insight into tropical fruit varieties which may be successfully cultivated in Southwest Florida.
Ken Ryan produces baby vegetables in containers and market directly to a select group of clients in Lee and Collier counties. He described his production system in detail and kept the interest of the group in this leg of the field day event. Attendees rated the day a huge success.

Ken Ryan outlines the ins and outs of niche market vegetable production

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