

Stahlman Beekeeping
Notes for 2022
National Honey Month
Clover honey



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Since this is National Honey Month, I am going to share material I included in my Beekeeping 301 CD now out of publication. It is a general idea of where certain honey crops can be found in the United States. At one time I collected honey samples from all over the U.S. and Europe and some Asia samples as well.



Each and every sample of honey has character, flavor, color and taste. I have my own opinions which is best. They most likely will differ with you. First, I would like to say that local wildflower sources vary from region to region. Most honey sold by beekeepers is classified as wildflower. Local spring wildflower honey will differ from fall wildflower honey to a marked degree.

During September some beekeepers are getting goldenrod honey. Bees store much of it for winter survival and some beekeepers consider it an important fall crop. New beekeepers are often surprised to walk into a bee yard and smell something in the air. A slightly

strong bitter smell – leading SOME TO THINK THEIR HIVES HAVE AMERICAN FOULBROOD! Welcome to the smell of Golden rod honey. Actually when ripe and aged, goldenrod honey is quite good.

The best honey I have tasted is Tupelo honey (my Opinion!). The second is Sourwood. And a third is Persimmon. Now I am adding Mesquite to the list. These are honeys with very identifiable taste and like buckwheat are sold in local markets. Buckwheat honey has a taste that many find distasteful but I was raised in Ohio where it is produced and many prefer it over all others. I participated in honey tasting tables in Ohio and at the BugFest in Raleigh. Most non beekeepers when comparing taste, reject buckwheat – saying it tastes like molasses.

Anyone keeping bees for honey production should have an idea of the taste of the honey being brought back to the hive and understand honey taste is one of the identifying characteristics of honey.

Stahlman Bee notes over the next few articles will contain information about a major crops of specialized honey. Taste is something hard to describe in specific terms. Often terms like strong, sweet, mild or bitter are used. They are not very descriptive. My description may differ from how another person might describe the smell and taste – so take that into account as you read my thoughts.

I am going to begin with honey from the clover families. When I started thinking about writing something about pollen, honey plants and the honey for these notes, I checked literature that I currently have available. I know the internet is filled with information but times have changed so much during my life time, almost every honey bottle I see selling in stores says clover on the label. Maybe some feel the mild taste of a light honey comes only from clover – thus it is clover honey rather than wild flower honey. Certainly wild flower honey is good but the name is less desirable. Interesting to me is that honey pollen in honey makes it easy to determine where the honey came from (plant as well as region). I also have received valuable information from readers of these notes – I am informed that DNA analysis is another way to determine pollen identification.

Historical records are also important to me. Over the years, areas once known for honey production have changed with farming practices. Add the desire for killing weeds, and keeping our road sides clear – bees have fewer opportunities to find nectar and pollen sources. And the greatest impact of all is the term “urban sprall.” In many cases I am going back 100 years to seek the best information on plants to determine what is reported about them.

Modern beekeeping is faced with the introduction of GMO plants. Large acreages of cotton, corn, soybeans etc. have been planted with modified seeds treated to lesson the damage from insects and to increase crop production. Widespread arial spraying also has an effect.

This week’s report is about **Clover Honey.**

Clover honey comes from plants that yield the most honey produced in the U.S.A. Generally the honey is light color (light amber – liquid gold)! It has a sweet mild taste. But it is not the only light sweet mild tasting honey. Some may be a little lighter or a little darker and bottled honey sold in stores is often blended with clover honey to sell a consistant light honey.

Light colored honey includes the following: all the clovers, alfalfa, basswood, black locust, raspberry, fireweed, Canadian thistle, apples, pickles, gallberry, sourwood, tupelo, palmetto, cataclaw, sage, and mesquite and others of less importance.

Amber colored honey comes from many sources. Plants like goldenrod, sunflower, heartsease, Spanish needle, sumac, milkweed, magnolia, beans, mints and others.

Darker colored honey comes from plants such as Tulip poplar, and buckwheat. I have seen some dark red/purple Kudzu honey as well.



The clover family represents the largest source of honey plants in the world.

Clover is a general term to describe plants in the Melilotus family and Trifolium family.

The USDA Plant Database lists many clover species.

I like to begin with a plant description but there are so many plants in this family and others called clovers. Thus, I have gone to: Wikipedia, the free encyclopedia to share the description they use:

Clover or **trefoil** are common names for plants of the [genus *Trifolium*](#) (from Latin *tres* 'three' + *folium* 'leaf'), consisting of about 300 [species](#) of [flowering plants](#) in the [legume](#) or pea family [Fabaceae](#) originating in Europe. The genus has a [cosmopolitan distribution](#) with highest diversity in the temperate [Northern Hemisphere](#), but many species also occur in [South America](#) and [Africa](#), including at high altitudes on mountains in the tropics. They are small [annual](#), [biennial](#), or short-lived [perennial herbaceous](#) plants, typically growing up to 30 cm tall. The [leaves](#) are [trifoliolate](#) (rarely quatrifoliate; see [four-leaf clover](#)), monofoliate, bifoliate, cinquefoil, hexafoil, septfoil, etcetera, with [stipules adnate](#) to the leaf-stalk, and heads or dense spikes of small red, purple, white, or yellow flowers; the small, few-seeded pods are enclosed in the [calyx](#).^[a] Other closely related genera often called clovers include [Melilotus](#) (sweet clover) and [Medicago](#) ([alfalfa](#) or [Calvary clover](#)).

Most often we think of one of the more popular growing clover as (*Trifolium repens*).



It is often called Dutch clover and blooms until hot dry weather arrives. In some areas it grows in very dense plots. I have seen it in bloom in almost all areas where I have traveled in the U.S.

It has been eradicated from most urban yards due to lawn treatments.

At times bees will work it hard and other times seem to ignore it.

Many clovers are nearly identical in growing habits, size and flowers with the exception of blossom color.

Trifolium Family pollen grains are prolate to subprolate; the amb triangular, rounded-triangular or with convex sides. The **grains** are reticulate. **Pollen grains** are small (25-28 X 18-20 micrometers).



It is very difficult to distinguish individual varieties of Trifolium clover. Some such as the taller growing red clover (grain size: 51.97 + 2.53 µm by 50.45 + 1.56 µm) can be distinguished by its grain size.



I am very fortunate to have grown up in the sweet clover belt of Ohio where fields of both yellow and white sweet clover were grown for seed. Sweet clover was not much known in the U.S. until the early 1900's. It grows tall 3 to 4 foot high.

Farmers rotated crops and if they raised live stock, red clover was very common. Remember those days when the milk man came to your house! Small farms all had livestock and grew clover and alfalfa to feed their livestock.

The sweet clover plant is now cultivated as a seed crop and seeds are available. It can be grown in waste plots, has a deep root system and the varieties if planted together provide nectar and pollen for well over a six week period.

We see clovers growing along road sides, open fields and abandoned lots. It is so common that everyone can identify with the clover plant.



One favorite clover plant I discovered when I kept bees in Georgia was Crimson Clover. Huge fields of red provided bees with opportunities to gather nectar. In fact it was troublesome for those of us shaking bees out of hives so we could sell bees in packages. Migratory beekeepers often take bees south for the winter. Red clover in bloom in April produces honey crops until the farmer kills the clover so it will provide a mulch to keep water in the soil when other crops are planted over it. In the north, I see clover and alfalfa cut prior to blooming for hay to feed cattle in feed lots. But these plants if available still provide ample supplies of nectar and pollen for bee fortunate to find them.



This is a sample of clover honey I collected from my bees in the mid 1990's. This sample came from a field of yellow clover called [Melilotus officinalis](#) (sweet clover).

Frank Pellet described clover honey: The quality of the honey is excellent. It is light in color and mild in flavor. It is rated as number one quality in principle markets.

There is no doubt clover honey from the broadest sense includes a class of plants that produce the most and finest table honey available in the world. The amount of clover honey of the Trifolium family produced in the United States is in sharp decline from previous years.



If you are thinking about growing clover consider the soil conditions of areas where it is to be planted. Clover plants love a soil rich in lime and do poorly in acid soils.

Observations by beekeepers over the years:

Sweet clover (*Melilotus* varieties) Grows in poor soils and produces greater honey crops.

Drought has a profound effect on (Trifolium varieties)
White clover Lack of rain cause flower heads to dry up
and in extreme cases for plants to die. Crimson clover is
not hardy in northern states.

The honey flow for Trifolium varieties begins flowering in
early spring and continues to the dry season. Crimson
clover begins flowering before other varieties especially
in the south.



Sweet Clover (yellow and white) are summer growing plants. In reality, it is not strictly a clover plant. It is closer to other members of the legume family such as alfalfa in appearance and habits of growth. Sweet clover is very hardy and is a **biennial**. It reseeds itself abundantly. It thrives in poor soils and because of its deep root system does well producing a honey crop that can be depended upon. The yellow sweet clover plant blooms and ripens its seed earlier than white sweet clover.

If you are a book collector, you may be interested in two books published in the 1920's. Do a google search to find these books. Amazon indicates they are available. The Mann Library at Cornell University has old books on line.

American Honey Plants: Together With Those Which Are Of Special Value To The Beekeeper As Sources Of Pollen (1920) This book is still found in used book stores with editions up to the 1970s. It was writtern By Frank Pellett and published by the Dadant Company. It has 467 pages with plants listed alphabetically.

Honey Plants of North America Revised Edition

by [Harvey B. Lovell](#) (Author), [Lawrence R. Goltz](#) (Editor) reprint of 1926 edition. It was published by the A.I. Root Company. This book covers honey plants in the U.S. 408 pages

The honey floras of the different states, and guide to the best locations for beekeeping, broken into 8 different U.S. regions, including

- The northeastern or New England region, including a bit of the Maritime Provinces,- The Appalachian Highlands, from the Catskills in New Your to northern Georgia and Alabama, The Coastal plain of the Atlantic Ocean and the Gulf of Mexico, The central lowlands north of the Gulf Coastal Plain, including the prairies, The Great Plains east of the Rocky Mountains, - The Rocky Mountains, The desert region west of the Rocky Mountains and east of the Sierra Nevada and Cascade Ranges , - The Pacific coast, west of the Sierra Nevada and the Cascade ranges.

Within each of these regions each state is described and evaluated for its value as a prosperous beekeeping region.

Articles have appeared often in bee journals about honey plants. **The Hive and the Honey Bee** published by Dadant in 1992 and 2015 Revised edition have extensive information about honey, honey attributes, and processing information. I consider this an almost indespensible resource for anything regarding honeybees.