

How to Judge Show Quality Honey Using the Welsh Method

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Beekeepers have known for centuries about the wondrous properties of honey. Not only is it one of nature's best sweeteners but it is also nutritious and is known to have some curative powers as well. As a result, beekeeping and honey production have enjoyed an increase in popularity over the last few years. Whether bees are kept commercially or as a hobby, production of good quality, pure honey is the goal of all beekeepers.

Honey shows vary in size and content. Some larger shows may include as many as thirty different classes in which beekeepers may enter honey or hive products. This document will concentrate on judging extracted honey only. Extracted honey is any honey which is strained of foreign particles and packaged without the addition of honeycomb, i.e., pure, liquid honey. The extracted honey should usually be packed in clear one pound, pint or quart jars. Each show will normally specify what type containers are accepted.



Figure 1. Extracted honey suitable for show. Photo: R. Brewer

According to Welsh rules, extracted honey classes are segregated into three color classes, light, amber and dark. Color grading glasses are used to separate the entries into the proper classes. The grading glasses are standardized by The British Beekeepers Association and all Welsh judges use certified glasses. There are two grading glasses in a

set, one light colored and one dark. Individual jars of honey are compared to these glasses. If the color of the honey is equal to or lighter than the “light” glass, it is put into the light category. If the color of the honey is equal to or darker than the “dark” glass it is put in the dark category. Any honey whose color falls between the two glasses is put into the amber category. Color grading of the entries takes place before the actual judging begins.



Figure 2. Placing honey in color category. Photo: R. Brewer

Sanitation or cleanliness is the most important aspect of showing honey. A Welsh judge will always wear a white coat and hat while judging. This not only distinguishes him/her as “the judge” but it also is a statement of sanitation. Cleanliness is the first consideration when judging begins. All entries are inspected visually for contamination which may include such things as dirt, dust, finger prints and other stains or smudges. The entire jar is inspected, from lid to bottom. Many otherwise good honey submissions have been disqualified at this point in the judging due to sanitation problems. Once an entry has passed the external examination, close examination of the honey itself begins.



Figure 3. Inspecting jars for cleanliness. photo: R. Brewer

A flashlight is used to look “inside” the honey. Shining the light through the honey will illuminate surprisingly small defects in cleanliness and clarity of the honey. At this stage the judge is looking for foreign items such as bee parts, lint, hair and crystallization. Any of these things will normally disqualify an entry or at the very least move it out of serious competition.



Figure 4. Using flashlight to inspect honey for clarity and cleanness. Photo: R. Brewer

The aroma of extracted honey can tell a lot about its overall quality. Off odors can be an indication of either internal or external contamination. For example, a fermented odor probably indicates that the honey's moisture content was too high when it was packaged. A burned or scorched odor means the honey was heated for a long period of time at too high a temperature. Heating honey is an acceptable way to help clear it, but over-doing it is not good. The best time to smell of the honey is when the jar is first opened. The aroma is pure and can even tell the judge what plants the nectar was taken from.



Figure 5. Checking aroma of honey. Photo: R. Brewer

After the jar lid has been removed for an aroma check the judge will check the inner surface of the lid for cleanliness. There are three basic types of contamination that a judge will look for when examining the inner surface of a jar lid. The first and most obvious type of contamination is honey as pictured in figure 6. This indicates that the jar was either tipped or inverted after packaging.



Figure 6. honey on surface of jar lid. Photo: R. Brewer

Dirt or other foreign matter is the second most evident form of contamination. Its presence can indicate many poor sanitation possibilities. And finally rust spots or compressed rubber gaskets in the lid tells the judge that the lids have been used before. Any of these conditions can disqualify an entry.



Figure 7. The jar lid pictured here is ideal. It is new and spotless meaning very good sanitation practices were followed. Photo: R. Brewer

As judging continues, the surface of the honey itself is checked for cleanliness. The surface of the honey should be free of any contamination. An unsanitary surface usually means disqualification. Debris or foreign matter floating on the surface of the honey can come from a number of sources. Many times the debris is wax particles, as pictured here, indicating that the honey was not filtered well. Other sources could be dust, hair or bee parts. Any of these indicate a sanitation problem to the judge.



Figure 8. particles on surface of honey. Photo: R. Brewer

Bubbles or foam on the surface of a show entry is the most common type of surface contamination. Their presence can indicate impurities in the honey or something as simple as too much air was incorporated when packaging. Bubbles may not mean disqualification but will usually downgrade the entry in placement.



Figure 9: bubbles and foam on surface of honey. Photo: R. Brewer

Ideally a sample should be free of any surface contamination. The samples in figure 10 are what every judge likes to see.



Figure 10: Clean honey surface. Photo: R. Brewer

Viscosity or thickness of honey is an extremely good indication of its quality. Thick honey indicates low moisture content, which is desirable. Moisture content should be below 18%. Anything higher and the honey can ferment in the jar. A practiced judge can usually tell if the moisture is within an acceptable range by the way it streams from a honey taster or spoon. There are times however when even an experienced judge needs a more detailed reading of moisture content. At these times a refractometer is used. By placing a small sample of honey on the stage of the refractometer an accurate measurement of percent moisture can be read. The percent moisture is read, like looking through a microscope, on scale in the refractometer. Any honey with a moisture content of 18% or above is disqualified immediately.

After the honey has been scrutinized for sanitation and aroma, only one consideration is left to the judge: taste. Taste is the defining point of any good honey. To ensure that the flavors are not mixed between samples a separate, clean honey taster is used for each.

The nectar source that a bee has access to determines the final flavor of the honey. In Georgia, Sourwood or Gall berry are highly prized. The flavor of these honeys will tell you why. There are however some plants such as Chestnut or Privet which produces flavors which are just shy of disgusting to most people. But taste preference is highly

subjective. The taste of honey is one of its strongest selling points so a good show honey should be pleasant with no obvious off flavors.

The most difficult part of judging a class of extracted honey is the final placement. The judge relies on what he or she has seen. There have probably been some samples removed due to sanitation problems, thereby narrowing the field. Those that remain are scrutinized and judged on their individual merit. All of the points examined thus far come into play and the judge makes a decision.

The Welsh Method uses no score cards, the judge relies on his/her knowledge and past experience to carry the day. Once the judging is done, the Welsh Judge leaves a written comment on each entry, regardless of placement or disqualification. The comment is to help the competitor understand the process and open a dialog with the judge. The comments are left on a business card which includes the judge's telephone number and e-mail address.

In summary, judging honey may be more involved than first believed. First the entries must be placed in color categories to make judging as equal as possible, then sanitation and cleanliness gets top consideration. Entries are inspected for cleanliness and contamination both outside and inside the jar. Dirt, dust, lint, finger prints and smudges are searched for on the outside and dust, bee parts, wax , lint and foam are looked at inside the jar—all to insure as pure a product as possible.

Once the cleanliness of a sample has been explored, and the aroma has been evaluated, the moisture content of the honey is taken into consideration. Over 18% moisture and the entry will be disqualified. When all other avenues of scrutiny have been exhausted taste is brought into play. It is important that the honey be pleasant and have no off flavors.

Finally the judge puts the entries into the final class placement and writes a comment for each entry. The written comment helps the competitor better understand the process of the Welch Method of judging honey.



Figure 11. Final class placement of show honey. Photo: R. Brewer