Topic 1: Bee products. Organoleptic evaluation and processing of bee products
Practical example

Bee products available on the market must meet specific standards, which are described in the so-called Polish standard. It is worth mentioning that the Polish standard is one of the most restrictive standards verifying organic apiaries in Europe.
Quality assessments of bee products can be done using various methods. And here we can distinguish organoleptic, physical, chemical, and serological methods.
Today's class will focus on organoleptic evaluation, which involves determining the taste, consistency, and smell of bee products use senses, to summarize in a note and compared my observations with the requirements described for this product in the standards.
When assessing the organoleptic properties of honey, we evaluate its consistency. We assess her by observing the honey dripping from the spoon and viewing honey crystals in a smear on a glass slide.
Honey color grading is done based on observations in daylight, watching a sample of honey under the light.
We evaluate the scent of honey by sniffing slightly warmed honey and possibly rubbed on a glass object.
When it comes to taste, honey must be tasted. After tasting each honey sample, rinse your mouth with water and write down your observation.
Organoleptic assessment of wax is carried out in the following way, that the consistency of wax is evaluated by pressing a sample of wax using a pencil, or by molding wax with your fingers. Wax is plastic when a depression forms upon pressing with a pencil. It can also be shaped by pressing with your fingers and does not stick. The wax colors are made in a similar way to honey colors in daylight.
The scent of wax is achieved by melting the wax and sniffing such freshly melted wax before it solidifies.
Results and observations are compared similarly to honey with the requirements specified in the Polish honey standard.
We can observe the shape and color of the stamens or pollen in daylight. The scent is evaluated immediately after opening the package containing the pollen flowery, whereas when it comes to taste, we determine it through tasting the pollen.
The organoleptic evaluation of propolis is similar to that of bee glue.
Checking consistency, we hold propolis in our fingers and observe, whether after a short time, when the temperature rises slightly, bee kit can be kneaded. As for the color, colors are best seen in good natural daylight.
The scent is evaluated, like in the case of haylage, immediately after opening the package.
All results are compared to the requirements described in the standards for this bee product.
The next task in class is to conduct an organoleptic evaluation of selected honeys.
The students fill in a table based on selected samples after tasting. They complete the table by describing the color, taste, and aroma of a specific type of honey.
The next task will be to make a wax candle, either by the rolling method or by the pouring method.
Candle rolling involves using a prepared sheet of beeswax foundation. The sheet is trimmed according to preference, the wick is placed along the edge, and the sheet is rolled evenly, gently pressing while rolling. The better we press the layers, the stiffer our candle will be.

The pouring method involves melting wax in a water bath and pouring it into a mold. If the mold is made of plastic or metal, it is advisable to wash the inner walls with a solvent or dish soap beforehand. Don’t forget to place the wick inside the mold.