Guide
to the
Cacao Sensory Analysis Tasting Form
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Introduction

Welcome.

In 2010, Equal Exchange and TCHO began the Cooperative Development Program aimed at strengthening their supply chain partners and interacting with them in new and innovative ways. When this project began, there was no universal methodology for physical and organoleptic evaluation of cacao beans. Through strategic alliances with cooperatives in Peru, Ecuador and the Dominican Republic, we proposed to develop the following tools to evaluate the quality of cacao: a Cacao Sensory Analysis Tasting Form and Guide, a standard Protocol for the Preparation of Liquor Samples, and a Taster Training Program. The objective of these tools is to achieve a common and inclusive language for all cacao stakeholders.

We are pleased to present this Guide to support your use of the Cacao Sensory Analysis Tasting Form. We hope that the guide will provide a more detailed explanation of the form, and help tasters to identify the potential, the attributes and the sensory profile of a sample. This document aims to support your understanding and interpretation of the form, and walks you through the steps to evaluate each of the attributes found in a sample. We have also provided references to engage the taster’s sensorial memory.

We hope that the following information will allow you to effectively carry out the sensory evaluation process for cacao. The intention is to make it understandable and accessible through the entire value chain, though the primary users may include the following:

- Laboratory technicians
- Cacao Sellers
- Cacao Buyers
- Chocolatiers

The information is presented with some assumptions. The first is that the taster already has his/her sample prepared. The second assumption is that said taster and his/her tasting panel has a suitable space for the analysis. The third is that the taster has some basic knowledge of cacao sensory analysis. If you require further information, please refer to our bibliography and resources at the end of this document.

Good Luck!
When conducting a tasting, print the following two pages double-sided to include the Tasting Form with quick reference instructions on the back.
# CACAO SENSORY ANALYSIS

## Tasting Form

**SAMPLE**

**TASTER**

**DATE**

<table>
<thead>
<tr>
<th>CATEGORIES</th>
<th>INTENSITY</th>
<th>NOTES</th>
<th>QUALITY (0–10)</th>
<th>POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aroma</td>
<td></td>
<td></td>
<td></td>
<td>x1=</td>
</tr>
<tr>
<td>Acidity</td>
<td></td>
<td></td>
<td></td>
<td>x1=</td>
</tr>
<tr>
<td>Bitterness</td>
<td>INTENSITY</td>
<td>0 to 2.5: ≥ 5 in quality</td>
<td>x1=</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.5 to 5: ≤ 5 in quality</td>
<td>x1=</td>
<td></td>
</tr>
<tr>
<td>Astringency</td>
<td></td>
<td></td>
<td></td>
<td>x1=</td>
</tr>
<tr>
<td>Defects</td>
<td></td>
<td></td>
<td></td>
<td>x2=</td>
</tr>
</tbody>
</table>

**Flavor**

- Cocoa/Cacao
- Sweet
- Nutty
- Dried Fruit
- Fresh Fruit
- Floral
- Spices
- Other

**Aftertaste**

<table>
<thead>
<tr>
<th>COMMENTS:</th>
<th>TASTER’S POINTS</th>
<th>FINAL SCORE</th>
</tr>
</thead>
</table>

**INTENSITY SCALE**

- 0: None/Not Detectable
- 1: Faint
- 2: Clearly Present
- 3: Moderate
- 4: Dominant
- 5: Extreme

**QUALITY SCALE**

- 0: Terrible
- 1: Bad
- 2: Ordinary
- 3: Good
- 4: Excellent

## TIPS TO SCORE QUALITY FOR DEFECTS

**Name the defect:**
A reduction in quality points should be defined in the notes.

**Inverse relationship:**
As the defect flavor(s) increase in intensity, the quality score decreases.
**Tasting Form Instructions**

### Filling in the Form

**Aroma**

Smell the sample. Mark the intensity of the aroma on the first scale, write any characteristics that you find in the notes section, and score the quality. Remember that a low intensity or even absence of aroma does not imply a lower quality.

**Acidity**

The relationship between intensity and quality varies depending on the perception and description of the acids that the taster finds during the evaluation. For example, if the taster perceives a citric or fruity acid, the score may be higher than if the acidity is more like vinegar (acetic acid).

**Bitterness and Astringency**

These are inherent characteristics of cacao, but the level of intensity can influence the quality, and there is often an inverse relationship. For example, a bitterness level that is ‘Clearly Present’ with an intensity of 2, might have a score between ‘Good’ and ‘Excellent’ in quality; while a higher intensity of bitterness may decrease the quality.

**Defects**

Increased intensity of defects means a lower score in quality. For example, if you find a strong flavor such as dirt that is ‘Dominant’ with an intensity of 4, your quality score will likely be between ‘Terrible’ and ‘Bad’.

### Using the Scales

This form contains two types of scales. The purpose of the Intensity Scale is to develop a flavor profile of the samples, while the Quality Scale helps to identify the sample’s potential. Remember that there is no direct relationship between intensity and quality, except in the case of Bitterness, Astringency and Defects. Half points are permitted when scoring on either scale.

### Examples of Defects

- **Mold**: musty, basement, mildew
- **Dirt**: mud, wet earth, dust
- **Raw**: vegetal, unripe, grassy, green
- **Contaminants**: plastic, chemical, smoke, metal, petrol
- **Decomposition**: hammy, meaty, rancid, putrid, compost

Note: Do not deduct points in defects for aroma, bitterness or astringency—these are evaluated in their respective categories.

- **TIP**: A maximum evaluation time of 10 minutes per sample is recommended.
**The Structure of the Tasting Form**

**Header**
The taster should fill out in clear and legible print the sample identification code, his/her name(s), surnames and date of the analysis.

**Note:** For Bitterness and Astringency the relation between intensity and quality is inverse, meaning that as the intensity increases, the quality tends to decrease.

**Comments**
This space is for observations which are not noted elsewhere (for example: appearance, texture). The taster may also use Comments to prepare a summary of the evaluation and recommendations.

**Intensity & Quality Scales**
See page 9

**Filling out the form**
The analysis of the sample will be distributed into several categories: Aroma, Acidity, Bitterness, Astringency, Defects, Flavor and Aftertaste. Each attribute is organized into four fields, evaluated as follows:

1. **Intensity**
   Assess the intensity of the perceived attributes on a scale of 0 (absent) to 5 (extreme), half points are allowed.

2. **Notes**
   Take note of specific attributes (descriptors) perceived in the sample, if the taster can and desires to capture that level of detail.

3. **Quality**
   The quality of each category is valued numerically, using a quality scale from 0 (terrible) to 10 (excellent). On this scale, the use of half points is also allowed.

4. **Points**
   Total points are valued numerically for quality, taking into account that in Defects and Flavor the quality points are doubled.

**Final Score**
This is the sum of all quality points obtained during the tasting. The maximum score is **100 points**.
Stages of Sensory Analysis

1. Observe the appearance: color, brightness, etc. The taster can take note of these observations in Comments and/or take them into consideration for in Taster’s Points.

2. Smell the sample to evaluate the Aroma category. Use a clean and odor-free container during this part of the evaluation.

3. Taste the sample to evaluate the following categories: Acidity, Bitterness, Astringency, Defects, and Flavors. If the sample is solid, chew it gently, allowing it to slowly melt on the palate. It is possible that the taster will have to repeat the tasting process several times in order to identify and capture all the information needed to complete the analysis.

4. When the sample has been ingested and/or has been expired, the taster analyzes residual flavors in the mouth for the Aftertaste category.

Intensity and Quality Scales

This section helps the taster to define and standardize the intensity of each attribute, and provide some guidance to quantify the quality score. During the analysis, the intensity and/or quality of any of the categories may vary and change.

**INTENSITY SCALE**

0 = None, not detectable
1 = Faint, weak presence
2 = Clearly Present, not difficult to perceive
3 = Moderate, indicating a distinctive feature
4 = Dominant, this attribute may mask or overpower other characteristics of the sample
5 = Extreme, the presentation of this attribute is the most intense possible for cacao in the sensorial memory of the taster

**QUALITY SCALE**

0 = Terrible
1 = Bad
2 = Ordinary
3 = Good
4 = Excellent

**TIP**

A maximum evaluation time of 10 minutes per sample is recommended.

To evaluate quality in defects, there is an inverse relationship: the higher the intensity of the defective flavor, or defective flavors, the lower the quality score.

Tips to Evaluate Quality in Defects

To assess the intensity of defects, you should take into account the total intensity of all the defects identified. We suggest that the taster explicitly name the defect that he or she has identified to avoid deduction of quality points without justification.
How To:
Analyze and Evaluate each Category
Aroma

CONCEPT
A sensory perception based on one’s olfactory senses, such as the sense of smell. 1

Steps to Analyze Aroma

1. The taster will take the sample container and bring it to the nose, and will deeply inhale trying to perceive the attributes of its aroma.

2. The taster will mark the intensity of the aroma, taking into consideration that the intensity is not directly correlated to the quality. Intensity for the aroma category varies widely depending on whether the sample is liquid or solid, but quality should not be affected by that factor.

3. Write down any notes related to the aroma; if the taster was not able to clearly perceive the aroma of the sample, the action could be repeated.

4. Rate the quality, using the scales as a guide, and for multiply the score by one. The maximum score in Aroma: 10 points.

**Example 1**

If an aroma or a combination of aromas related to subcategories for flavor is perceived (cacao/chocolate, sweet, nutty, dried fruit, fresh fruit, floral, spices), the quality assessment might be between Good and Excellent.

<table>
<thead>
<tr>
<th>CATEGORIES</th>
<th>INTENSITY</th>
<th>NOTES</th>
<th>QUALITY (0–10)</th>
<th>POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aroma</td>
<td></td>
<td>caramel, raisin, brownie</td>
<td>9.5</td>
<td>x 1 =  9.5</td>
</tr>
</tbody>
</table>

**Example 2**

If an aroma or a combination of aromas related to the defects subcategories is perceived (mold, dirt, raw, contaminants, decomposition) is perceived, the quality assessment might be Bad or Terrible.

<table>
<thead>
<tr>
<th>CATEGORIES</th>
<th>INTENSITY</th>
<th>NOTES</th>
<th>QUALITY (0–10)</th>
<th>POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aroma</td>
<td></td>
<td>mold</td>
<td>3</td>
<td>x 1 =  3</td>
</tr>
</tbody>
</table>

**TIP**

The mark between two points on the scale indicates a half point—so in this example the intensity score is 2.5.
CONCEPT
The organoleptic property produced by pure or mixed substances, that when tasted generate acid flavor like citrus. Acid is the elemental flavor caused by diluted aqueous solutions of acidic substances, such as citric acid or tartaric acid.²

Steps to Analyze Acidity

1 During the tasting stage of analysis, mark the intensity of the acid or the combination of acids perceived, taking into account that the intensity is not directly correlated to the quality. The relation between intensity and quality varies depending on the perception and description of the types acids found during the tasting. These include citric, acetic, lactic, butyric, tartaric, malic, carbonic, and phosphoric, etc.

2 Write down any notes related to the acidity.

3 Rate the quality, using the scales as a guide, and for multiply the score by one. The maximum score in Acidity: 10 points.

ACIDS REFERENCES

<table>
<thead>
<tr>
<th>Acid</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Citric acid</td>
<td>lime, orange, clementine, grapefruit</td>
</tr>
<tr>
<td>Malic acid</td>
<td>apple</td>
</tr>
<tr>
<td>Tartaric acid</td>
<td>grapes, tamarind</td>
</tr>
<tr>
<td>Acetic acid</td>
<td>vinegar, sour</td>
</tr>
<tr>
<td>Lactic acid</td>
<td>sour milk, yogurt</td>
</tr>
<tr>
<td>Butyric acid</td>
<td>rancid butter, fatty foods, vomit</td>
</tr>
<tr>
<td>Nitric acid</td>
<td>putrid meat</td>
</tr>
</tbody>
</table>

If you perceive citric or fruity acid, the quality score might be between Good and Excellent.

<table>
<thead>
<tr>
<th>CATEGORIES</th>
<th>INTENSITY</th>
<th>NOTES</th>
<th>QUALITY (0–10)</th>
<th>POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acidity</td>
<td>3 4 5</td>
<td>citric, clementine</td>
<td>5</td>
<td>x 1 = 5</td>
</tr>
</tbody>
</table>

If you notice an acid similar to vinegar, with an intensity of 2 or "Present", but it does not characterize the sample and overwhelm other features, the quality score might be Ordinary.

<table>
<thead>
<tr>
<th>CATEGORIES</th>
<th>INTENSITY</th>
<th>NOTES</th>
<th>QUALITY (0–10)</th>
<th>POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acidity</td>
<td>2 3 4 5</td>
<td>sour, vinegar</td>
<td>5</td>
<td>x 1 = 5</td>
</tr>
</tbody>
</table>
**CONCEPT**
An organoleptic property produced by pure or mixed substances, that when tasted generate a bitter flavor. Bitterness is the elemental flavor caused by dilute aqueous solutions of various substances, such as quinine or caffeine.3

**Steps to Analyze Bitterness**

1. During the tasting stage of analysis, mark the intensity of the bitterness taking into account that intensity could correlate to quality and, frequently, there is an inverse relationship. You should refer to the small scales next to the categories names for Bitterness and Astringency.
   a. If the taster identifies a level of intensity for bitterness between Absent with an intensity of 0, and Present with an intensity of 2-2.5, the quality rating might be Ordinary, Good or Excellent.
   b. If the taster identifies a level of intensity for bitterness between Clearly Present with an intensity of 2.5-3, and Extreme with an intensity of 5, the quality rating might be Ordinary, Bad or Terrible.

2. Write down any notes related to bitterness.

3. Rate the quality, using the scales as a guide, and for multiply the score by one. The maximum score in Bitterness: 10 points.

**Bitterness References**

- Citrus peel and pith
- Burnt coffee, caffeine
- Chicory, Verbena
- Aspirin

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**Example 1**
If the bitterness intensity level is 2 or Clearly Present, the quality rating might be between Good and Excellent.

<table>
<thead>
<tr>
<th>CATEGORIES</th>
<th>INTENSITY</th>
<th>NOTES</th>
<th>QUALITY (0-10)</th>
<th>POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bitterness</td>
<td>0 to 2.5: ≥ 5 in quality 2.5 to 5: ≤ 5 in quality</td>
<td>mild bitterness, not a dominant characteristic of the sample</td>
<td>8</td>
<td>x1 = 8</td>
</tr>
</tbody>
</table>

**Example 2**
If the bitterness intensity level is 5 or Extreme, similar to the experience of chewing an aspirin, the quality rating could be Terrible.

<table>
<thead>
<tr>
<th>CATEGORIES</th>
<th>INTENSITY</th>
<th>NOTES</th>
<th>QUALITY (0-10)</th>
<th>POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bitterness</td>
<td>0 to 2.5: ≥ 5 in quality 2.5 to 5: ≤ 5 in quality</td>
<td>aspirin</td>
<td>2</td>
<td>x1 = 2</td>
</tr>
</tbody>
</table>
Astringency refers to the puckery or drying sensation created in the mouth and throat. A strong astringent taste is often described as “sharp,” and it can leave the mouth feeling rough, raw or sandpapery. A low to moderate amount of astringency may have a more subtle, even “slippery” feel.

Steps to Analyze Astringency

1. During the tasting stage of analysis, mark the intensity of the astringency taking into account that intensity could correlate to quality and, frequently, there is an inverse relationship. You should refer to the small scales next to the categories names for Bitterness and Astringency.

   a. If the taster identifies a level of intensity for astringency between Absent with an intensity of 0, and Present with an intensity of 2-2.5, the quality rating might be Ordinary, Good or Excellent.

   b. If the taster identifies a level of intensity for astringency between Clearly Present with an intensity of 2.5-3, and Extreme with an intensity of 5, the quality rating might be Ordinary, Bad or Terrible.

2. Write down any notes related to astringency.

3. Rate the quality, using the scales as a guide, and for multiply the score by one. The maximum score in Astringency: 10 points.

Astringency References

- Nut skins, seeds of certain fruits
- Unripe or under-ripe fruits, peels of fruits such as bananas or plantains
- Oversteeped tea, some red wines

Example 1

An astringency that starts out very light at the beginning and that increases during tasting up to an intensity of 2, or Present, can have a quality rating between Good and Excellent. In this case, the taster describes it as a sensation similar to the experience of tasting an over-steeped black tea.

<table>
<thead>
<tr>
<th>Categories</th>
<th>Intensity</th>
<th>Notes</th>
<th>Quality (0–10)</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Astringency</td>
<td>0 to 2.5: ≥ 5 in quality 2.5 to 5: ≤ 5 in quality</td>
<td>Sensation similar to tasting a black tea, increases over time</td>
<td>7</td>
<td>x1 = 7</td>
</tr>
</tbody>
</table>

Example 2

An astringency that is Dominant with an intensity of 4, can have a quality rating between Bad and Terrible. In this case, the taster describes it as a sensation similar to the experience of tasting a banana peel or an unripe banana.

<table>
<thead>
<tr>
<th>Categories</th>
<th>Intensity</th>
<th>Notes</th>
<th>Quality (0–10)</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Astringency</td>
<td>0 to 2.5: ≥ 5 in quality 2.5 to 5: ≤ 5 in quality</td>
<td>Banana peel</td>
<td>3</td>
<td>x1 = 3</td>
</tr>
</tbody>
</table>
Defects

CONCEPT
This category is defined by the presence of defective flavors that are not characteristic of cacao, generally associated with a deteriorating condition or transformation affecting the product.

Steps to Analyze Defects

1. During the tasting stage of analysis, mark the intensity of the defect or combination of defects perceived, taking into consideration that as the defect flavor(s) increase in intensity, the quality score decreases.

2. Write down any notes related to defects. Note that any reduction in quality points should be defined in the notes. If the sample is clean or free of defects, the quality score is Excellent.

3. Remember that, in this case, flavors or textures related to the processing of the sample during roasting or grinding are not Defects. You may record these observations in Comments and suggest that the sample be processed again with new parameters.

4. Rate the quality, using the scales as a guide, and for multiply the score by TWO. The maximum score in Defects: 20 points.

EXAMPLE 1
The sample does not have an identifiable defect. In this case where the taster is unable to name the defect, he or she should not reduce the points in quality.

<table>
<thead>
<tr>
<th>CATEGORIES</th>
<th>INTENSITY</th>
<th>NOTES</th>
<th>QUALITY (0–10)</th>
<th>POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Defects</td>
<td></td>
<td></td>
<td>10</td>
<td>20</td>
</tr>
</tbody>
</table>

EXAMPLE 2
If you find a Dominant taste of mold and wet soil with an intensity of 4, then you might rate the quality between Bad and Terrible.

<table>
<thead>
<tr>
<th>CATEGORIES</th>
<th>INTENSITY</th>
<th>NOTES</th>
<th>QUALITY (0–10)</th>
<th>POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Defects</td>
<td></td>
<td>Strong mold, wet soil</td>
<td>2</td>
<td>4</td>
</tr>
</tbody>
</table>
**CONCEPT**

The impression caused by a food or another substance, which is determined primarily by chemical sensations detected via taste (the tongue) and smell (the retronasal cavity).

**Steps to Analyze Flavor**

1. During the tasting stage of analysis, mark the intensity of the perceived positive or neutral flavors, taking into account that negative flavors are evaluated mainly in Defects. The relationship between intensity and quality varies depending on the perception and description of the flavors found during the tasting.

2. Write down any notes related to flavor(s). Not all the flavor categories are always present in a sample, only describe what you perceive.

3. The quality rating is based on a combination of factors including, but not limited to: harmony, clarity, complexity.

4. Rate the quality, using the scales as a guide, and for multiply the score by TWO. The maximum score in Flavor: 20 points.

**FLAVOR REFERENCES**

<table>
<thead>
<tr>
<th>FLAVOR REFERENCES</th>
<th>REFERENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cocoa/Cacao</td>
<td>chocolate, fudge, brownie, cocoa powder, nibs</td>
</tr>
<tr>
<td>Sweet</td>
<td>candy, honey, cane sugar/panela, malt, molasses, brown sugar</td>
</tr>
<tr>
<td>Nuts</td>
<td>peanuts, almonds, pecans, pistachio</td>
</tr>
<tr>
<td>Fresh fruits</td>
<td>apples, banana, melon, pineapple, cherry, grapes</td>
</tr>
<tr>
<td>Dry fruits</td>
<td>raisins, prunes, dried fig, dried cherry, dried peach</td>
</tr>
<tr>
<td>Flowers</td>
<td>roses, jasmine, coffee flowers</td>
</tr>
<tr>
<td>Spices</td>
<td>cinnamon, cloves, basil, oregano, bay</td>
</tr>
</tbody>
</table>

**EXAMPLE 1**

<table>
<thead>
<tr>
<th>CATEGORIES</th>
<th>INTENSITY</th>
<th>NOTES</th>
<th>QUALITY (0-10)</th>
<th>POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flavor</td>
<td></td>
<td></td>
<td>9</td>
<td>x2 = 18</td>
</tr>
<tr>
<td>Cocoa/Cacao</td>
<td></td>
<td>chocolaty</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sweet</td>
<td></td>
<td>cane sugar</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nutty</td>
<td></td>
<td>almonds, hazelnuts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dried Fruit</td>
<td></td>
<td>raisins</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fresh Fruit</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Floral</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spices</td>
<td></td>
<td>sweet tabacco</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Aftertaste

**CONCEPT**
The residual flavors left in the mouth and on the palate, after the sample has dissolved completely.

**Steps to Analyze Aftertaste**

1. When the sample has been completely ingested or/and has been expiated, the taster analyzes residual flavors in the mouth.

2. The taster will mark the intensity of the aftertaste, taking into consideration that the intensity is not directly correlated to the quality.

3. Write down any notes related to the aftertaste.

4. Rate the quality, using the scales as a guide, and multiply the score by one. The maximum score in Aftertaste: 10 points.

---

**EXAMPLE 1**
An aftertaste that might be rated Good or Excellent in quality may be prolonged or short, and may include positive attributes related to subcategories for Flavor (cacao / chocolate, sweet, nutty, dried fruit, fresh fruit, floral, spices) and might have low intensities of bitterness and astringency.

<table>
<thead>
<tr>
<th>CATEGORIES</th>
<th>INTENSITY</th>
<th>NOTES</th>
<th>QUALITY (0–10)</th>
<th>POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aftertaste</td>
<td>1 1 1 1</td>
<td>long-lasting citrus note, mild bitterness</td>
<td>8</td>
<td>8x1 = 8</td>
</tr>
</tbody>
</table>

---

**EXAMPLE 2**
An aftertaste that might be rated Bad quality may be prolonged or short, and the intensities of bitterness and astringency tend to be higher.

<table>
<thead>
<tr>
<th>CATEGORIES</th>
<th>INTENSITY</th>
<th>NOTES</th>
<th>QUALITY (0–10)</th>
<th>POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aftertaste</td>
<td>1 1 1 1 2</td>
<td>sharp astringency that persists and intensifies</td>
<td>3.5</td>
<td>3.5x1 = 3.5</td>
</tr>
</tbody>
</table>

---

**TIP**
The arrow indicates a change in the intensity perceived during the evaluation. In this example, the intensity started at 3, but increased to a 4.
Comments

Steps for Comments

1. This space is for observations which are not noted elsewhere (for example: appearance, texture).

2. The taster may also use Comments to prepare a summary of the evaluation and recommendations.

3. The taster may take note of any additional factors that have influenced the sensory analysis, such as environmental conditions and sample processing.

Example

| COMMENTS: | A complex sample with an aroma of roasted almonds and dried fruit flavors such as prunes that last through the aftertaste. |

Taster’s Points

CONCEPT

The taster’s general impression and subjective quality score for the sample, taking into account all of the other categories of evaluation. In this category, the taster can rate the sample based on personal and professional perception of quality.

Steps for Taster’s Points

After evaluating all other categories, rate the quality, using the scales as a guide, and multiply the score by one. The maximum score in Taster’s Points: 10 points.

Final Score

The taster will tally all of the quality points from the far right-hand column (after multiplication) and notate the sum in the box next to Final Score. The maximum Final Score: 100 points.
Analyzing your Results

Scoring

The use of the information that results from sensory analysis depends on the user and his/her objectives. Possible actions are infinite but below we offer some suggestions. Logically, the higher the Final Score, the better the sample. Final scores can be used for decision making, such as:

- Create flavors profile and other sensorial characteristics
- Identify and correct processing defects
- Decide if the sample is accepted for buying or selling, or if it is rejected
- Establish a value or ranking in comparison with other samples
- Determine a purchase or sales price
- Determine winners of a contest
- Set a standard or make comparison with a standard

Calibration

An important step is to calibrate with other tasters. Calibration is not easy and requires a lot of practice. After tasting, the leader of the tasting panel must collate all results in a single summary scoring sheet. We recommend that the tasting panel review results category by category, and if there is a lot of difference between scores, the panel can re-taste and discuss in order to reach a final decision.

This image from the program Cropster shows the calibration of a group of tasters on a particular sample. The black lines represent the average scores.
BIBLIOGRAPHY AND REFERENCES


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2 Ibáñez Moya, 6.
3 Ibáñez Moya, 6.
4 Goodwin.
5 Ibáñez Moya, 8.
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