HUMIDITY

in the Green Coffee Bean

APPRECIATIONS ON HUMIDITY

IN THE GREEN COFFEE:

Green coffee once dried is stable in its percentage humidity if its container and storage comply with the desirable conditions.

The ideal percentage of humidity needs a final appreciation, characteristic of each roasting master, since it will condition objectively and evident the development of the bean during the roasting,basically the acidity and aroma, in its final result.

Although the range is the referenced, the ideal percentage is never linear, the same for all coffees,in green, the processes that have been applied and their origin conditions this decision.

The water activity and the percentage of humidity in green coffee are two data to be read and interpreted jointly, complementary.

Any amount is considered moisture liquid containing on a solid, in the in green coffee: water

The percentage of humidity and the risk of the appearance of fungus and mould in the beans go hand in hand, the higher the percentage, the greater the risk that these appear and spoil the green coffee,a few damaged beans can ruin a roast.

The humidity range in which a green coffee bean should be ready to roast is between 8% and 12.5%. If we idealize the range it must be between 10% and 12%*

*Both data by a direct measurement method (also known as the "coffee" scale)

It is a trend, increases the sensory profile of the cup, try,work with humidity percentages of 15% in the scale of coffee, but at the moment it has not been implemented due to the development of microorganism of the bean and the priority in its health.

Green coffee is sold by weight, not a good idea buy water at product price to a greater extent than the strictly necessary.

A NECESSARY STEP

Communicate clearly between the two parts, the method and scale that was applied in the test

NOT ALL HUMIDITY PERCENTAGES

IN GREEN COFFEE ARE THE SAME DIRECT

MEASUREMENT DATA

It is an empirical model for weight difference, the sample is weighed before dry it, it dries on a stove, there are several models, or in lamps dry it, infrared for a set period of time, weighing again and After this period, will give us the water difference that has migrated in the process. All direct measurement methods lack a constituted time and temperature complex for analysing and verifying them.

INDIRECT MESUREMENT

The bean humidity measurement is base on the electrical frequency emitted that circulates through it, there are two types that compass all of them, those that do it by the electrical resistance of the bean, which is practical, portable and not highly-priced, but you will miss the millimetric precision. On the other side, the ones that do it on the constant dielectric of the the bean more precise but bulky, complex and expensive consequently less popular.

A brief overview

The tools to measure humidity in green coffee

The centigrade scale is not the same as the Fahrenheit scale or the Kelvin scale. With humidity, it happens the same, the percentage in the ISO 1446 scale is not equivalent to the percentage in ISO 6673. In coffee and in other measurements scales, there are comparison tables.

It's relevant to know, that at the time the humidimeter is calibrated by a technical service, it will return working on the current ISO 6673 scale, the updated version. Independently, that you have been using to the date which is the cause for some confusion.

To Know the humidity of the green bean,i t should be measured with a humidimeter (it also applies the method of weight difference), and validate in which scale is representing the data of the humidimeter, as in other physical analyses.

Conversion table

It allows each individual to apply the method that is more comfortable in terms of usability and to be able to take the most accurate and efficient measurement possible.

Direct method Coffee scale	Direct method ISO 6673	Direct method ISO 1447 / 1446	Direct method ISO 6673	Direct method ISO 1447 / 1446
10,00 %	6,59 %	8,85 %	7,28 %	9,78 %
10,50 %	7,72 %	9,52 %	8,10 %	9,99 %
11,00 %	8,76 %	10,20 %	8,91 %	10,37 %
11,50 %	9,70 %	10,91 %	9,73 %	10,94 %
12,00 %	10,55 %	11,64 %	10,55 %	11,64 %
12,50 %	11,30 %	12,38 %	11,37 %	12,46 %
13,00 %	11,96 %	13,15 %	12,18 %	13,39 %
13,50 %	12,52 %	13,94 %	13,00 %	14,47 %
14,00 %	12,98 %	14,75 %	13,82 %	15,70 %
14,50 %	13,35 %	15,58 %	14,64 %	17,09 %

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