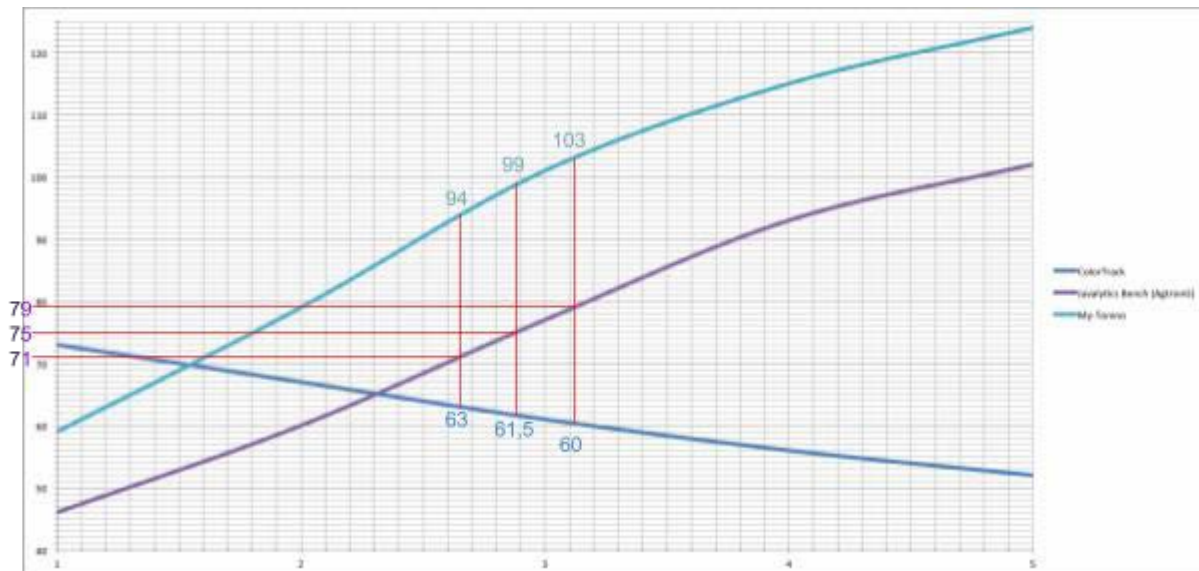


Roast color correlation for the SCA certification system

In order to get a pragmatic correlation between different roast color analyzers 5 samples was created with systematic roast color difference and each sample was measured 6 times by 3 different roast color meters

- MyTonino late 2016 version
- Javalitics JAV-RDA-DN
- ColorTrack

and when arranging the coffees from dark to light on the x-axis the graphs for each color meter looked like this:



In the SCAE heritage material a roast color precision challenge required +/- 4 Agtron Gourmet precision to get maximum points and +/- 8 Agtron Gourmet to get secondary points and this challenge is carried over in the new SCA certification system for the Intermediate level. In order to carry this test out with other color meters we need to know what that difference would be on other scales such as MyTonino and ColorTrack and this is estimated on the graph above and these seems to be the relevant intervals:

$$\begin{aligned} \pm 4 \text{ Agtron Gourmet} &\cong \pm 4,5 \text{ MyTonino} \cong \pm 1,5 \text{ ColorTrack} \\ \pm 8 \text{ Agtron Gourmet} &\cong \pm 9 \text{ MyTonino} \cong \pm 3 \text{ ColorTrack} \end{aligned}$$

The above data are extracted by some data generated in CoffeeMind Academy as part of a protocol design process for other purposes, but the extracted data are relevant to support SCA trainers with an estimate of color correlations. The project is not exhaustive in the subjects as it should have been tested on a range of different coffees but for our purpose we did the mapping on one coffee only (Colombia Horizontes). Also the below takes Tonino 99 = Agtron 75 = ColorTrack 61,5 as the reference point (often ends up as the color when the roast is terminated midway between 1st and 2nd crack)