**Acid Trials**

This is a good way to measure the effect of added tartaric acid on the pH and flavor of the wine.

1. To make a stock solution of 50% Tartaric Acid:
    a. Measure 50 g of Tartaric acid. Add Tartaric acid to a small beaker
    b. Add distilled water up to 80mL
    c. Stir until the acid is dissolved
    d. Pour the contents of the beaker into a 100mL volumetric flask
    e. Bring the volume up to 100mL with distilled water
    f. Transfer to a labeled plastic bottle with a cap
    g. Store in the refrigerator.
2. To do the acid trial:
    a. Measure 50 mL of wine with a graduated cylinder and pour it into a beaker.
    b. Add a stir bar and put it on the stir plate with gentle stirring.
    c. Measure and record the pH.
    d. Add 25uL of 50% the stock Tartaric Acid and record the pH. (This is the equivalent of adding 0.25g/L tartaric to the wine.)
    e. Continue adding 50% Tartaric Acid stock solution and recording the resulting pH until you reach the target pH. (ex: 3.25 for white wine, 3.50 for red)
3. To set up a taste trial:
    a. Measure 50 mL of wine into each glass.
    b. Add the 50% Tartaric acid stock solution at the concentrations around your target pH
        i. remember that 25 uL = 0.25 g/L so to taste the effect of adding 1.25 g/L you would add 125 uL of tartaric acid stock solution.
        ii. Ex: For a taste trial for a white wine you may want to taste three wines, with target pH of 3.30, 3.25, and 3.20.
    c. Mix, then taste.