Agriculture in Print

Making Soy-based Ink

Standard Laboratory Operating Procedure #100

Soy Ink

Laboratory: Biotechnology/Bioresearch SLOP prepared by: R. Sanders

Location: Bioresearch Lab Last Revision: 9/30/15

General: Ink is a pigment mixed in a liquid that will not blur when put on paper. Inks made with soybean oil are made from a renewable resource, are much more biodegradable and print with brighter colors that don't rub off.

Safety: Safety glasses if working in Bioresearch Science Lab

Materials:

Kool-Aid Packets	Disposable Pipettes	Water
Balances	Soybean Oil	Stamps
Small Paper Cups	Soy Lecithin	Paper
Paper Towels	Stir Sticks	

Procedure:

- 1. In a paper cup, add 6g of Kool-Aid and 5mL of water and mix with stir stick completely.
- 2. Next add 1mL of soybean oil to the Kool Aid solution and mix well.
- 3. Using a balance, weigh out 0.3g of soy lecithin granules, or 0.5mL of liquid lecithin and stir until all granules have dissolved completely.
- 4. Then fold a paper towel in half, then fold in half again to make a little pad.
- 5. Then pour the soy ink in to the middle of the paper towel pad. The soy ink will soak up quickly.
- 6. Moisten a rubber stamp by pressing the stamp on to the soy ink in the paper towel, then print image on paper.
- 7. Steps 1-6 can be repeated to create different colors.
- 8. Steps 1-6 can be repeated with various milk types, as well.
- 9. Compare the performance of the inks.

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