



14.8.11

Seed Lab at Ball Horticultural Company

This post was written for <http://mrbrownthumb.blogspot.com> and this text of chunk is just here to attempt to thwart the feed scappers. If you like this blog please consider subscribing via RSS at <http://feeds2.feedburner.com/MrBrownThumb> and get the MrBrownThumb blog delivered to your inbox. You can find my gardening videos at <http://youtube.com/mrbrownthumb>

Even though the average home gardener, like myself, isn't a direct customer of the Ball Horticultural Company many of the packaged seeds and plants we buy at garden centers and nurseries were developed by Ball Hort. An example being **petunia 'Black Cat'** which is the world's first black petunia. Recently, I was invited on a tour of the gardens at Ball in West Chicago, Illinois., which include container gardens, a seed lab, example gardens for vegetable and shade gardening, and a trial garden where Ball Hort plants are grown alongside competitor's plants. If you've read this garden blog with any regularity you may have noticed that seeds are regular topics so I jumped at the chance of touring a seed lab. Below are a couple of pictures from the seed lab that I thought other seed-obsessed gardeners may find interesting.



The seed lab within Ball Hort's newly built, LEED-certified facility, is state-of-the-art for the seed business, but it was reminiscent of sets for the Batman television series or something out of Doctor Who. This isn't a knock, just an observation and an example of how my overactive imagination works. This is the seed coating room where seeds like: marigolds, geraniums, zinnias, gazania, ranunculus, anemones, and dahlias are coated with something called Ball Controlled Growth, Slick Coat. Employees stand in front of those tubes and pull levers all day long as a supply of seeds and the seed coating mixture is mixed inside. Among other things, the seed coating increases the visibility of seeds for the person sowing them, and makes them heavier so seeds can't easily fly away. Behind us were seed sorting machines that separated the very lighter seeds that may be duds and not suitable for sowing.



The seed pelleting room where seeds are mixed in the large seed mixers pictured at right. I never understood why it was necessary to pellet seeds until I sowed petunia seeds I saved from my garden. Pelletted seeds are easier to handle and sow in seed trays. If you've grown the [SimplySalad](#) mix this is where the seeds were pelleted. Another reason for pelleting seeds is that it makes combining three different seeds in one pellet that makes growing plant plugs easier. These plugs are used for planting those lush and full hanging baskets you may see hanging from lamp posts around your city or town. Pictured at left are pelletted: begonias, dianthus, marigolds, impatiens ornamental millet and tomato seeds.

Even though the average home gardener, like myself, isn't a direct customer of the Ball Horticultural Company many of the packaged seeds and plants we buy at garden centers and nurseries were developed by Ball Hort. An example being [petunia 'Black Cat'](#) which is the world's first black petunia. Recently, I was invited on a tour of the gardens at Ball in West Chicago, Illinois., which include container gardens, a seed lab, example gardens for vegetable and shade gardening, and a trial garden where Ball Hort plants are grown alongside competitor's plants. If you've read this garden blog with any regularity you may

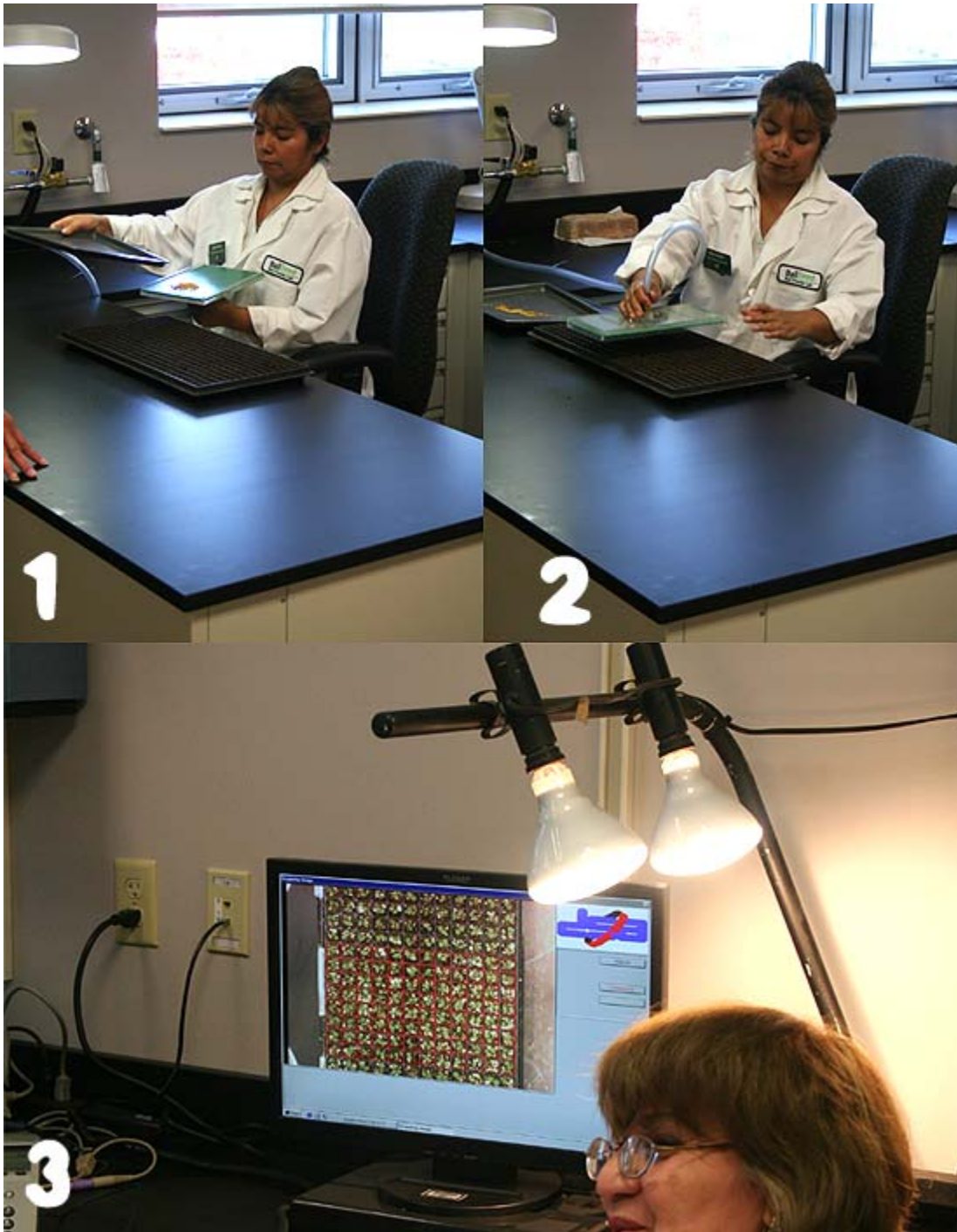
have noticed that seeds are regular topics so I jumped at the chance of touring a seed lab. Below are a couple of pictures from the seed lab that I thought other seed-obsessed gardeners may find interesting.



The seed lab within Ball Hort's newly built, LEED-certified facility, is state-of-the-art for the seed business, but it was reminiscent of sets for the Batman television series or something out of Doctor Who. This isn't a knock, just an observation and an example of how my overactive imagination works. This is the seed coating room where seeds like: marigolds, geraniums, zinnias, gazania, ranunculus, anemones, and dahlias are coated with something called Ball Controlled Growth, Slick Coat. Employees stand in front of those tubes and pull levers all day long as a supply of seeds and the seed coating mixture is mixed inside. Among other things, the seed coating increases the visibility of seeds for the person sowing them, and makes them heavier so seeds can't easily fly away. Behind us were seed sorting machines that separated the very lighter seeds that may be duds and not suitable for sowing.



The seed pelleting room where seeds are mixed in the large seed mixers pictured at right. I never understood why it was necessary to pellet seeds until I sowed petunia seeds I saved from my garden. Pelletted seeds are easier to handle and sow in seed trays. If you've grown the **SimplySalad** mix this is where the seeds were pelleted. Another reason for pelleting seeds is that it makes combining three different seeds in one pellet that makes growing plant plugs easier. These plugs are used for planting those lush and full hanging baskets you may see hanging from lamp posts around your city or town. Pictured at left are pelletted: begonias, dianthus, marigolds, impatiens ornamental millet and tomato seeds.



The germination testing room is probably the best example of the use of technology in the seed growing process. Seeds are placed on these pads (1) where they are suctioned into tiny holes that keep them in place while the (2) technician sows them into the cells. Imagine having one of these to help you sow seeds into your seed starting trays? The seeds are sent away into other rooms to germinate and when they're brought back they're placed under a camera (3) where a computer program counts the cotyledons, first set of leaves to emerge from a seed, the rate and total germination to eliminate weaker seed lots. There's another

machine in the room that scans plugs and conducts even more tests on the seedlings. Definitely a lot more high-tech than the **seed germination tests you can do at home.**



One of the rooms the seed trays are sent to, before the germination testing is done, is this misting room. Pictured above is a seed misting room where seedlings are grown under

flourescent lights. You may be able to make out the yellow coil in the back of the picture. That's the misting mechanisim that travels across the seed flats misting the seedlings. How much easier would your seed starting season be with one of these rooms?

There are other rooms and sections not pictured here for the sake of brevity. There was one room where batches of seeds are brought to the brink of germination and then stopped at just the right time. This priming of the seeds makes for higher, faster and more uniform seed germination, and allows seeds to germinate at a wider range of temperatures. Another room I left out because I didn't want to enter it was the humidity room. As you might imagine the humidity of this room is set rather high-kept at a constant 100% humidity. The humidity room is my idea of hell on earth. As much as I like seeds and wonder what it would be like to work in a seed lab I wouldn't want to have to deal with that room.

While **Ball Hort** sells primarily to plant growers and retailers there is a section of website for gardeners where you can learn about the various plants they bring to market. A lot of the public landscaping around Chicago is done with plants from Ball Hort and when I see a new plant variety that I'm not familiar with I poke around their website to find the name of it. The same may hold true for plants used in planters and streetscaping in your town or city.