

## EQUIPMENT &amp; TECHNOLOGY

# Five questions on BENCHES

Greenhouse Management recently spoke with Jake Whitfill of Southwest Agri-Plastics about benches.



**J**ake Whitfill, sales with Southwest Agri-Plastics, recently answered some questions on benches for *Greenhouse Management* magazine. He has a degree from Tarleton State University in Agricultural Services & Development and interned at Texas A&M's Agri-Life extension.

**GM: What are the different types of benches?**

**JW:** As far as benches go, there are really as many types as you can imagine. It seems anything you can stack plants on to make them easier to handle can be considered a greenhouse bench. Most bench options consist of two main parts: the frame and the bench top. Bench frames are typically made from wood, steel, or a combination of both. Each of the frame options can utilize a variety of bench top materials including: fencing wire, expanded metal and wood. Plastic bench tops are also growing increasingly popular.



Jake Whitfill



**GM: What are the benefits and drawbacks of different bench options?**

**JW:** I would say there are two things to take into consideration when discussing pros and cons of greenhouse benches. There is variation in the cost of these materials, as well as the durability. Constructing a wood frame is a popular option and not too expensive. It is easy to work with and readily available, but being porous it can allow bacteria, molds and fungi to live on its surface. Steel is a very durable frame material, but needs to be galvanized to resist rust, especially in a greenhouse.

Materials like wood and fence wire for bench top material may be inexpensive when you are thinking about initial cost, but could cost you more in the long run. These materials can be difficult to work with as far as handling pots and trays and may need to be replaced more often as compared to some of the other options.

Expanded metal is a fairly durable and flat surface for bench top material. You can slide flats and pots across it easily and it can last a long time. The metal has the potential to rust and has often been known for its sharp edges. This is problematic when it rips your clothes, but can be a liability when it causes injury.

It is difficult for me to find negative aspects with plastic bench tops. They will not rust or rot, and are as simple to work with as wood. You do not have to worry about sharp edges when using plastic bench tops and they can last as long as, if not longer than the metal options.

**GM: What are some things new growers should think about when considering purchasing benches?**

**JW:** Whether it's an individual or a large greenhouse company that is looking

into buying benches they should take into account the amount of money they are looking to spend and the life they expect to get from the benches. There may be some varieties that will suit the needs of some more than others. If you are only growing annuals in small trays you do not necessarily need the same bench as a grower who typically uses larger size pots.

**GM: When do growers need to replace their benches? What are some typical signs of wear and tear?**

**JW:** Mostly, I see people replacing benches in the winter time. This seems to be when the plant market is the slowest. Over time wire tops begins to sag and wood tops can rot and break. Even the expanded metal tops can rust to the point of breaking. Sometimes a person may step up on a bench to fix a nozzle or hang a basket. This can often put more stress on a bench than it is rated to handle whether it's plastic, metal or wood benching. Oftentimes this requires replacing or repairing a bench or two.

**GM: How can growers maximize the life of existing benches?**

**JW:** If your benches aren't everything you thought they would be, they do not necessarily need replacing. There are several cases in which they could be modified to extend their life and make them more user friendly. Bench frames often outlive the tops that are placed on them. A good wood frame with a sagging wire top can make it almost impossible to keep a pot from falling over. Instead of replacing the entire bench a grower could put plastic bench panels on an existing frame and have a top that is flat and easy to work on. **GM**