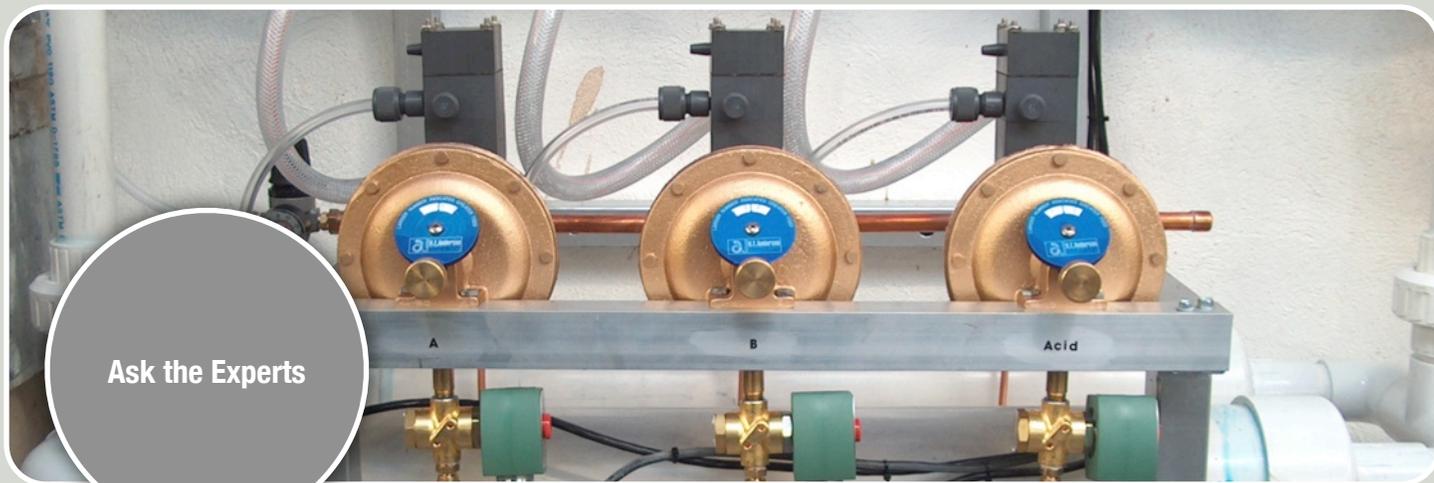


GREENHOUSE - Q AND A

TIPS AND ADVICE

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Ask the Experts

Question : Fertilizer Injection. What the heck does A/B and acid mean ?

Depending on the crop, your water conditions and the crop fertigation requirements a lot of growers are using multi head injection systems. The primary reason for multi head injection is basically to provide separation of the various fertilizer types in the stock solution tanks. The most common multi-head system is A/B and acid.

As an example say, your fertilizer feed program calls for the use of magnesium sulfate and calcium nitrate supplementation. Well if these two products were mixed up in high concentration in one stock tank basically you'll end up with a nice powdery white colored sludge at the bottom of the stock tanks. What happens is the calcium from the calcium nitrate is attracted to the sulfates from the magnesium

sulfates so you end up with quite expensive insoluble calcium sulfate in the bottom of the tanks. The same holds true with calcium and phosphate. You end up creating mono calcium phosphate in the bottom of the tank. So, hence the expression A/B (sulfates / phosphates) in one tank, calcium in the other.

Acid injection well depending on your fertilizer and water chemistry (i.e. pH) of water, if the pH of the final fertilized water is above 6.5 or higher, you may find deficiencies in trace (micro nutrients showing up). That doesn't mean that they are not there, but because the pH of the fertilized water is on the high side they become unusable for the plant. The solution is to use a bit of acid to get the pH down

(typical range is 5.5 to 6.2) and magically a lot of your plant deficiencies (trace/micro) will disappear.

So A/B and acid means a three head system. One (A) for phosphates / nitrates / potassium / sulfates, another one (B) for the calcium / nitrates and trace elements and the last head for acid injection. For a total of three heads.

On fertilizer feed programs we try to encourage the growers to mix up their A and B tanks so that the density of the fertilizer solutions are the same at the same injection rate. The trace elements can be placed in either tanks.

If you have any questions please feel free to contact our office.

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*Consultants, Suppliers and Installer to the
Commercial Greenhouse Industry*

