

Increasing Lime levels and PH in the casing without a mixer

We recommend that growers should be checking the pH of their casing on a regular basis as it will affect the performance of the casing layer, not least when using our Mycro Nutrent products.

You have probably already read our article “The Science of Casing” and realise the importance of increasing lime levels for buffering the pH of the casing and the use of hydrated (slaked) lime for increasing it to 8.

If you have a mechanical mixer, then it is a simple task to do this and this the BEST SOLUTION for mixing lime PERIOD.

However, some of our customers do not have a casing mixer and use ready mixed casing which is of low pH or blend together peat and chalk in a bay and if they want to work with Mycronutrient before committing to buying a mixer, there is another possibility.

One way to increase pH in this circumstance is to make a slurry of fine lime/chalk with a small proportion of slaked hydrated lime. This can be done simply with a small 50-60L drum half filled with water and the lime products stirred in. The lime mix can then be decanted or pumped off over the casing mix. The mix must be kept agitated during the process of emptying the drum. Add normal water to bring up to required moisture.

The casing bay should not allow water to leach away. Mixing can be done by shovel or loader. Leave to react for 2-3 days. Remix, check pH, add more lime mix if needed, leave to react again, then add water ready for use.

Optimum pH should be 8.

THE KEY IS GIVING TIME FOR LIME TO REACT, IT TAKES A FEW DAYS!

An example of what we have done with a small 1m² bag of casing (20-23kgs).

- 1, Mix 1kg fine lime/chalk with 50g slaked lime in 2 litres of water. Agitate. Pour on casing
2. Leave 2-3 days, turning over from time to time.
3. Check pH. If below 8. Mix 100g fine lime with 50g slaked lime in 500g water. Agitate. Pour on casing. Mix batch. Leave 1 day.

MIXING without a machine is no match to doing it with. There are lots of possibilities without the need to go to specialist mushroom casing mixers. Growers use old cement mixer bodies and agricultural feed wagons both of which can be powered with PTO from a tractor.

Please contact us directly for more details/information stuart@nutrigain.com .

How do I measure pH?

The simplest way is to use pH indicator sticks. We recommend Macherey Nagel (or similar)



ftp://ftp.mn-net.com/english/Flyer_Catalogs/Test_Sticks_Test_Papers/Fl.%20pH-FixTest_StripsEN.pdf

Take a few small pieces of casing from a few different areas. Shake together. Put about 25g into a clean glass and add 250g distilled water. Stir mix and place indicator stick in the solution. Leave for 15 minutes. Match up the 3 colours as closely as possible and read the pH off the scale.