

PELLETED SEED: BEST MANAGEMENT PRACTICES

Failing to dial in a few key factors can result in both poor germination rate and uniformity. If you struggle with pelleted seed in your operation, keep the following in mind the next time you sow a fresh batch.



It's all about "melting" the pellet. Seed pelleting material is often some combination of clays and/or other binding agents. To get water to the seed so it can imbibe moisture and start germinating, the pellet needs to be removed. By design, watering is the best way to erode the pellet, but there are some definite dos and don'ts in this process:

DO:

- Water-in freshly sown trays with pelleted seed right as they come off the sowing line.
- Apply water through an irrigation tunnel with multiple emitters in sequence.
- Ensure that enough water is applied to thoroughly soften the pellet.

DON'T:

 Allow watered-in trays with pelleted seed to sit around in the headhouse. Get them into your germination chamber or propagation house ASAP so the pellet does not dry out.

- Apply so much water that the pellet completely disintegrates in the tray before it reaches the germination chamber or greenhouse. This can dislodge seeds and cause them to get washed out of the tray or buried.
- Use high-pressure water in your water tunnel after sowing. While higher water pressure may help break apart the pellet, it is more likely to bury the seed in the plug cell.

Here are some more key considerations:

Once your pellets soak up water, do not allow them to dry out before they are fully disintegrated. If a moistened pellet dries out, it will develop a hard shellac-like feel. At this point, it will be virtually impossible for the radicle or cotyledon to push out of the pellet, and germination will fail. For slower-moving crops like begonias, cover newly sown trays with Remay or a thin poly film to keep moisture levels high around the seed and ensure that they do not dry down.

After watering in, the pellet should be soft and easily fall apart with light pressure from a pen/pencil tip. Within a couple of days after sowing, the pellet should look like a "little bowl of oatmeal with a raisin in the middle" (to borrow one of Dr. Will Healy's colorful analogies). Shortly thereafter, most of the pellet should be washed away into the media.

Bad pellets are rare, but things can occasionally go wrong in the pelleting process. If your pelleted seed normally looks dull-colored but a new batch looks shiny coming out of the package, take a couple of seeds and try to crush the pellet. If it takes more than a very small amount of force to crush the pellet, this is a good indicator that you may have a bad lot. Pelleted seed in this state will likely fail and is probably not worth planting.

For more info, check out this video on <u>HOW TO PROPERLY MELT SEED PELLETS</u> from PanAmerican Seed.

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