***Cassia fistula* (Golden Shower Tree)** in the heavy clay soils

To successfully plant a ***Cassia fistula* (Golden Shower Tree)** in the heavy clay soils of Darlington, you must avoid planting it directly into a standard dug hole, which acts like a bucket and drowns the roots. Instead, you need a highly aerated, fast-draining blend of **60% existing clay/gravel soil, 20% coarse washed river sand (or grit), and 20% mature organic compost**, heavily treated with **gypsum** to break up the clay structure.

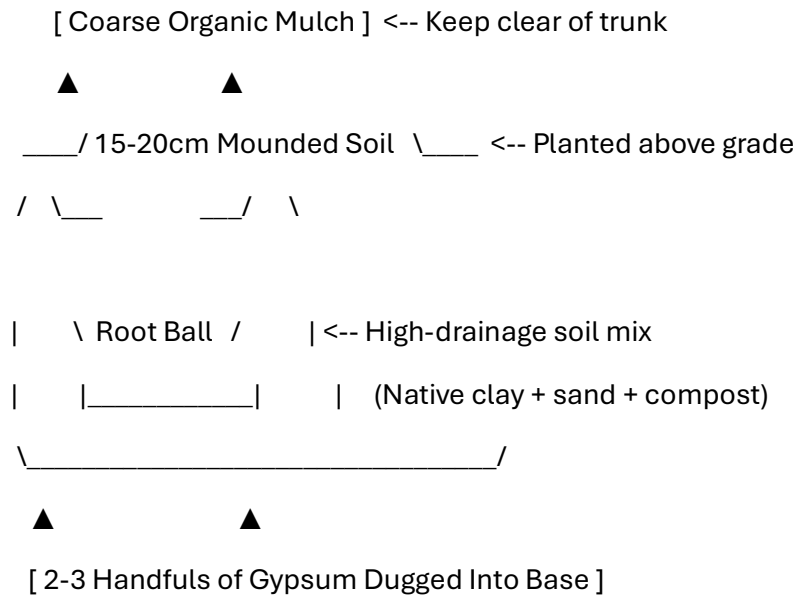
Cassia fistula demands excellent drainage to prevent root rot, the way you modify and structure the planting area in Darlington's hills is critical.

The Soil Modification Recipe

Do not backfill the hole with 100% store-bought potting mix. This creates a "bathtub effect" where water sits in the hole and rots the tree. Mix your backfill on a tarp using these ratios:

- **60% Native Darlington Soil**: Keeps the tree acclimatised to the surrounding ground. Break up all heavy clumps.
- **20% Coarse River Sand / Eco-Grit**: Do not use fine builder's sand, which turns clay into concrete. Coarse grit creates essential macro-pores for drainage.
- **20% Quality Soil Improver**: Use a well-composted organic matter or a concentrate like Green Life Soil Co. General Concentrate or composted manure to add microbes and structure.
- **Clay Breaker**: Add **2–3 handfuls of powdered gypsum** into the mix and at the bottom of the hole to chemically break down the clay particles.

Step-by-Step Planting Strategy for Darlington Clays



1. **Mound Up (Crucial Step)**: Instead of digging a deep pit, dig a very shallow, wide dish—about **twice as wide as the root ball** but only half as deep. Create a **15–20 cm high mound** or raised bed above the natural ground level using your soil mix. Plant the tree into this mound so the top of the root ball sits slightly higher than the surrounding ground.
2. **Fracture the Pit Edges**: Use a mattock or spade to chip, score, and crack the solid clay walls and floor of your shallow hole. This gives the roots physical pathways to escape the hole rather than swirling inside smooth clay walls.
3. **Settle with Clay Breakers**: Before backfilling, douse the hole with a liquid clay breaker or seaweed solution (like Seasol) to stimulate initial root resilience.
4. **Mulch Correctly**: Apply a **75mm layer of coarse, chunky woodchip mulch** (like Dsatco Triple C or pine bark) over the mound. **Keep the mulch 5cm away from the bark of the trunk** to prevent fungal collar rot.