

## Vegetables

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My alarm went off at 6.30am, as it does every morning. I don't live far away but now that I am director of the Centre I like to get in a bit before everyone else arrives. I parked my bike in the communal shed, locked it carefully, took off my helmet and went around to the front of the plate glass building nestled between the old stone colleges.

Sometimes it takes me longer to get through security than it does to ride across town. I've worked at the lab for ten years now, and everyone knows me, but still I have to follow the drill. Searches, biometric checks, the works. It is a bit over the top for a cente that studies vegetables: spinach, broccoli, garlic and carrot. What can be top secret about that?

I dumped the pannier down by my desk and started up the computer. I have to write quarterly progress reports to our anonymous funders and the next one is due very soon. I stared at the screen. Our project, code named Broccolita, had run into trouble. The idea was simple enough. Our task was to produce a single super-vegetable that would have outstanding nutritional qualities, combining the benefits of bulbs, leaves, roots and brassicas all in one. It would be drought resistant, low carbon, healthy and cheap. According to our proposal it would be mass produced, but prized by amateurs and professional chefs alike. If we got the genetics right, the taste would vary depending on where and how it was grown. There would be no need to plant and harvest dozens of different crops: just this one would do.

Since the recent ban on beef and dairy cattle, there had been an explosion of research in our field. The journals were full of it. New variants of pulses were being developed in India and there was growing interest in Amaranth, Fonio and Kerza. Here, in Cambridge, we were working on a totally new approach. With decades of experience in genetic modification, and with all the resources at our disposal we were sure to come up with a solution. That was the promise, but at the moment, nothing but nothing was going our way. + Oleracea oleracea "Broccolita" was just not getting off the ground.

One by one the rest of my team arrived. They put on their white lab coats and went about their work. I turned back to my computer. What if this was a fruitless project? If there were more delays, the funding would soon dry up and then what? No team, no lab, no future. I decided to put the report aside and focus on the morning's email. I was nearing the bottom of the pile when I found a message from my grandmother in Sussex.

Dear Dan

It's been a long time since you visited and I've got something exciting to show you. I know its short notice, but what about this week-end? I could take you out for lunch and we could potter about in the greenhouse. I'm sure a break would do you good. How about it?

All my love,

Granny P. xxx

I started my reply,

Dear Gran,

Sorry I can't make it this week-end, I've got a progress report due next week...

But then I thought better of it. Why not have an afternoon off. It wouldn't change the course of the project, I'd still have time to write the report and she was probably right, I could do with some time off.

The sun was shining when I set out the next day. I was still worried about the project but the drive put me in a better mood. Granny P. lived in cottage down a rough pot-holed track and when I finally arrived, she was out in the garden, as usual. Stripey, her tabby cat, was winding round her legs. Gran was getting deaf and these days she was a bit stiff as well.

'Hello Gran' I yelled.

She looked up. 'Dan, it's so good to see you. I can't wait to show you what I've grown'

She led me over to the greenhouse, and there it was. A thriving hybrid of not just two but three species. Potato, tomato and kale. She smiled broadly: 'I've grown a potoka'. I gazed at her in amazement. She'd done it!

Gran likes a glass of wine and as we settled into lunch at the Cumberland Arms she told me all about it. I had my notebook at the ready. I needed every detail. She chattered on but when we got to dessert she looked me straight in the eye. 'Now don't you go selling my secrets Dan. If my little discovery is going to help the world, it needs to be freely available.' I took a deep breath, 'ok Gran'.

Back at the laboratory I composed my report. 'I'm sorry to say that this quarter we have made absolutely no progress on + Oleracea oleracea Broccolita. The brassica element of the plant is technically impossible to hybridise. I don't want to be the bearer of bad news, but we simply cannot continue. We will have to terminate the contract'.

I knew the consequences would be dire. The centre could not survive without external funding, and one by one the members of my team would disperse, leaving for more promising jobs elsewhere. I didn't have long. When everyone had gone home I set to work in the eerie light of the experimental greenhouse. I'd promised Gran that I'd not sell her secrets, but if I didn't have proof of concept, her ideas would wither on the vine. If she was right, and if I could replicate her results, maybe we could do some good after all. No one paid any attention to my few pots and why should they? Researchers often had some pet project underway.

I spent the next three months in meeting after meeting. The funders were not happy. The university was not happy. No one wanted to pull the plug, but everyone could see that the writing was on the wall. Broccolita was a no-go. My friends and colleagues were kind but it was obvious that my career was blighted and that I was about to lose everything I had worked so hard to achieve. Sometimes I felt duplicitous, sometimes righteous, sometimes cowardly and sometimes downright excited. I, and only I knew that in a corner of the greenhouse the future of agriculture was gradually taking shape.

Tracey, my administrator was sure of another job in the university and she didn't mind planning the farewell party. Those few of us who were left gathered around the battered sofas and chinked our glasses of fizzy white wine. That was it, the end. At around ten that night the porter came by with his belt of jangling keys. 'Working late', he said? 'Yes, I replied, I've got something I need to finish off'.

The next morning, I parked my bike in its usual place. I went over to the turnstiles but for some reason my swipe card didn't work. I rubbed it and tried again. No luck. Bob from security came over. 'Sorry mate, you don't have clearance, I can't let you in'.

I cycled back home and checked the web. It was on fire. The details that I'd posted on the university web site the night before had gone viral: 'Insta-gran's secrets revealed'; 'Broccolita to save the world: open source information for all to use'; 'Desperate Dan and his wonder plant'; 'Cambridge scientist turns against his funders', and so it went on. I glanced at my inbox. The first email was from a familiar address. 'Well done Dan, I am so proud of you – all my love, Granny P xxx'.



I'd expected to be given the sack for what I'd done and that's exactly what happened. To my surprise I haven't minded about losing my job. When the weather is fine I pack my little tent and ride out into the countryside. Everywhere I go there are variants of Broccolita, something that has never happened with mono-crops before. The wildlife is returning, the bees love it and as I pedal on I feel a warm glow of satisfaction.