

# THE SECRET LIVES OF PLANTS

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Illustration: Julia Kuhl

KIRK'S BIOSUIT cast a shadow like a storm cloud over the tangle of regenerating woodland border plants. The ominous silhouette from the lance of the spray gun strapped to his back snaked through patches of dappled sunlight, like a cobra sniffing out its prey.

Staring through the visor of the protective suit, he felt isolated from the landscape he was scanning, but not from the expectant glare of his supervisor, Paul, or from his teammates with the suspect in cuffs sandwiched between them on the margins of the rough ground. Only Olwyn, the other trained botanist on the team, seemed uninterested in what he was doing. She was off to the left of the main group examining wild roses that were climbing into the trees.

“Come on,” the supervisor shouted at him. “Find something. I want to get on with this bust.”

Kirk swung his scanner in a wide arc in front of him, but it slumbered. He shrugged at Paul in half-hearted apology.

He hoped the whole thing was a false alarm. Somebody with a grudge, filing a malicious complaint against someone he or she hated, setting the person up for an invasion of privacy and a few hours grief courtesy of the Environmental Agency. At least hoaxes got him out of the office. It was when a call-out was for real he hated the job and resolved, again, to get out of it and into something more honest. Like insurance or prostitution.

He moved closer to a handsome dogwood standing proud in a sea of fern and bramble runners. Twigs snapped underfoot; the scanner went off the scale. His heart sank as he prepared to ply his trade perverted by history and economics. The natural order reversed: a biologist paid to extinguish life instead of study it.

Stupid, he thought. All those years of training in botany, the postgrad genetics programs. Just to follow orders blindly and spray insane poisons over some poor bastard's illegal transgenic plants. The dogwood's red branches and delicate green leaves swayed in a slight breeze. It was as if they were waving in surrender: don't shoot. He didn't like to think about how sentient the plant might be.

He knew the official line, stopping unlicensed transgenic stock from polluting the patented wild gene pool - a holy grail for which the corporations were only too keen to sponsor government agencies. The corporations were big on intellectual property rights, as long as they were their rights. But he knew the other side of the story, too. Five years before, when it had still been legal for anyone to do what they wanted with their chromosomes and small start-ups had stolen a march on the big boys, he'd felt the rush of sensations and memories that shivered through him in the garden of remembrance when the corrugated leaves of the Japanese medlar containing his dead wife's DNA brushed against his skin. It felt as though Chizu was caressing him from beyond the grave.

He looked at the motionless guy in handcuffs and wondered whose DNA the dogwood carried.

Kirk felt Paul's gaze on him. With no other option, he sighed, unclipped the lance, pointed the spray gun's nozzle and pulled the trigger.

Systemic toxins dripped from the foliage onto a soft blanket of ferns that shriveled and then discolored as though winter had come in an instant. The man in the cuffs, shoulders slumped, bowed his head and looked at the ground. Sometimes they became aggressive while the plants that were the living memories of their wives, lovers, children, and friends were destroyed. Sometimes it just broke them, watching the death of their loved ones all over again.

“I’m arresting you for violation of the Genome Purity Act,” the team leader said to the cowed prisoner, whose bent shoulders shook. It seemed to Kirk that this was the part of the job that Paul really enjoyed. He hated him for that almost as much as he hated him for not being in the least interested in why people took the risks they did.

“Plants found on land owned by you have tested positive for the presence of human DNA and have been destroyed in accordance with section one of the act,” Paul carried on, although the man wasn’t listening. “You have the right to one email. You have no other rights.”

The man offered no resistance as Paul and another member of the team manhandled him into the confinement cell at the back of the four-wheel drive Agency truck. Kirk climbed into the front of the vehicle with the others and stared bitterly out of the window.

“Idiots,” Paul said, taking his place in the driver’s seat and firing up the engine. “It’s been illegal four years and still they think they can get away with it.”

“Some of them are getting away with it,” said Olwyn.

“Not many.”

“Four years? Amazing,” Kirk said, idly daydreaming that Paul would lose control of the truck and die in a twisted pile of metal. He couldn’t imagine anyone wanting to preserve that man’s DNA in a transgenic plant, hidden away from the state’s eyes and lovingly tended. “Amazing,” he repeated.

The amazing thing is, he thought, that he could live with himself for being a part of it.

Next day, keying in the report was a chore. In many ways it was worse than actually pulling the spray gun’s trigger. It gave Kirk time to dwell on what it meant to the plant’s owner, speculate on what it might mean to the plant. His hangover helped. Not that it assuaged his guilt, but it made him feel as though he’d suffered physically as well as mentally - and that seemed appropriate, comforting almost.

Screwing up his face and stretching, he felt the muscles in his back and shoulders tighten and relax as he stared at the words that he had formed on the screen. He was stuck for a conclusion. The story of his life.

“This job sucks,” Olwyn said as she pounded away at her own keyboard behind a workstation divider in the open-plan office. “They ought to give us a compulsory sabbatical, give us the chance to do something constructive for a change.”

How many times had they had that conversation? He couldn't argue against her. She had lost her husband before he'd lost his wife - events that gave them a shared perspective on life's fragility. Kirk knew she had done even more academic research than he had. She had every right to be annoyed that she was wasting her time. In an ideal world maybe, or even in a marginally better world than this one, where you didn't need to keep watching your back and where people like Paul didn't call the shots, you might reasonably expect occasionally to use your training to do something useful. But when jobs are scarce you keep your head down, melt into the background, just get on with it. Look for the perks.

A message icon flashing on his computer screen distracted him. He hit the read button and felt as though he'd just dived naked into a glacial lake.

He stared, numbly, at the characters onscreen. “I know your secret, my green-fingered criminal friend,” they read. Glancing around to see if anyone was watching, Kirk switched to command-line mode and probed the header to see where the message had come from. It was internal. That was all he could see. The header details were garbled. He switched back to message mode. “Plants that cannot walk can still escape with a little help. A talk about your career options is appropriate. Kew hothouse. Saturday 14:30.”

He hit the delete key, reported sick, and went home.

In his greenhouse, a draft of warm air from a vent played across his forehead as he watched a hoverfly. The flat-bodied insect hung in the air by the lowest flower of a cucumber plant trained up a

wire, before moving two millimeters to one side, its wings a virtually motionless blur, and then flying in a straight line to the next highest flower before darting off at a tangent and landing on the thin shiny green leaf at the tip of a chili plant instead. It looked like it knew what it was doing, even though it kept changing direction. He wished he could pull the same trick. The hoverfly merely brushed its legs over its head and then flew to a white chili flower.

Leaving the humidity of the hothouse, Kirk walked through into the airy, cooler section of the greenhouse and stood in front of the Japanese medlar. The plant was five years old now, with a spread of about a meter and a height of one and a half. He stroked rust brown hairs underneath the oblong leaves and felt the familiar bond with Chizu.

Years evaporated. And they were both leaving the surgeon's office.

"The cancer is beyond treatment," the surgeon had said. "I'm sorry."

Neither of them cried on the way home. Until they thought of the children they would never have.

Then, tears dried, they sat together on the futon her parents had given them as a wedding gift, poring through the catalogues of available plants. "That's it," Chizu said. "That's me. I want that one."

He looked at it and smiled. *Eriobotrya japonica*, Japanese medlar. "It is you," he said.

Her giggle was like a wind chime borne on a breeze in the fall. "You always tell me I meddle."

They kissed and called the genome hacker. Then they sobbed together again.

The guy who ran the one-man outfit took some healthy cells from Chizu before the cancer ate her sense of humor and her life. It took only a week to grow her biomolecules and sequence them into those of the plant. She saw the tiny green shoot that carried part of her before she died.

She touched the plant and laughed and cried with joy and sorrow at achieving a sort of immortality that her body wouldn't be around to appreciate.

While he was still alive, she said, he ought to be sequenced with his own plant: maybe *Cassia didymobotrya* - Golden Wonder, after the color of his hair. Then, she said, they could grow side by side and live forever in the garden of remembrance after their human bodies had rotted away.

Her human life stopped days later and he was left with a corpse and a thriving seedling.

She'd been in the garden of remembrance for a few months before the global corporations finally bribed enough politicians to get the copyright laws changed in their favor. Private transgenic operatives were outlawed immediately.

Biofilters surrounded the transgenic gardens to keep the maverick patent-free genes of the deceased in, but that wasn't good enough. The corporations wanted no genetic jokers in the pack potentially diluting future profit streams.

The government concurred, and Kirk's life became a cross between a bad dream and combat footage after he was drafted into the Agency. Swirling clouds of pesticides and the silhouettes of dead trees stuck in his memory as teams, in their suits, marched through their allotted quadrants in garden after garden, spray guns spitting, erasing memories and copyright complications.

When he was assigned to the garden in which he'd paid for Chizu's plant to grow, he tried telling himself that there was nothing he could do - at first. But he made sure he was first out of the truck and chose the quadrant she was growing in. A perk of the job. She called to him and he knelt before her as poison filled the air. His fingers closed on her stem. Love and fear tingled from it and through him. It was as if she retracted her own roots from the dirt as he carefully lifted the sapling and stowed it inside his biosuit. Getting Chizu's plant out of the garden had been easier than he dared hope. Everyone was too busy to pay any attention to anyone else.

He transplanted it as soon as he got home. Watered it in and kissed its leaves.

Years later and she still thrived.

“I was lucky,” he told the plant and felt its grateful agreement.

Others had had to rely on brute force. Rioting crowds stormed gardens to liberate their loved ones before the Agency gangs came with more pesticides - and army backup. A lot of people had died then, shot inside the gardens. But some had liberated their plants and taken them to fields, copses, and gardens - anywhere they might be safe. Tracking them down was a long job. A continuing job. A shameful irony that he was still doing it.

Sometimes, he thought, the only reason he kept the job was because it seemed the safest way of keeping Chizu’s plant a secret. Putting up with hypocrisy was a necessary evil. Bottle everything up and everything will be all right. At least it had been until that message. He had no idea who had found him out or how.

Something had to be done. The medlar had to be moved, for one thing. He’d known that all along, but like working through his grief at losing Chizu, he’d kept putting it off. Grieving for someone who was still there in your greenhouse soil wasn’t easy. The future, even as it crept up, always seemed so remote when you lived in the past and the present.

Eventually the tree would reach eight meters. Safe places were going to be difficult to find. But he could increase the odds of Chizu’s survival. He mixed compost and gravel in a seed tray and sharpened his knife. He took a half-dozen cuttings, dipped them in rooting hormones, and put them into the seed tray.

He stood up and thought about places he could plant Chizu’s descendants out in the wilds. Perhaps he could smuggle one into Kew? He ran his finger along the edge of the curved pruning knife. Razor sharp. If he took it with him to Kew on Saturday he could buy a bit more time. He hoped that Paul was the one who’d found him out. If so, the hardened steel slicing through skin and jugular vein

would be satisfying in its own right, as well as winning a reprieve for the medlar.

A gust of wind blew into the greenhouse and with it a woman's voice. "Kirk," she said. Startled, he felt the sting of metal on his finger as the pruning knife bit. A line of bright red blood oozed from the parted flesh, quickly forming a large globule that fell onto one of the Japanese medlar's long glossy leaves. As the drop reflected the sunlight and ran down to the base of the leaf Kirk turned to face the voice.

"Olwyn?"

With the sun behind her, the red highlights of her hair gleamed almost as vividly as his spilled blood on the waxy leaf. "You weren't in the house," she said, "I thought you might be in the garden. It's a nice greenhouse you've got."

Heart beating rapidly, he sucked his wound and grimaced at the hot, salty taste as he tried to collect his thoughts.

"I thought I'd see how you were, you left work in a hurry," she looked at the Japanese medlar as she swung a bag from her shoulder and put it on the ground. "Beautiful plant. I've got one, too. I wouldn't bother keeping it in here though. It'll do fine in a sheltered spot outside, south or southwest facing." She looked through the glass at the small plot beyond. "Not much room in your garden, is there?"

"No," he said, desperately trying to read her expression, "I was thinking that it was time it got moved out."

She squatted down on the path by the plant, picked a leaf tip between her finger and thumb, brought them gently together and ran them the length of the vein. He shuddered, wondered what she felt from the plant. "Nice condition," Olwyn said, not looking at him, but staring at the leaf instead. "Is the job getting you down?"

"Well . . . it just seems so pointless at times."

"I know what you mean. Everyone feels like that now and again."

"Except Paul."

"Paul's not interested in plants is he? Just the people who might grow them," she turned on her haunches and looked him in the eyes. "He's not interested in the bonds between people and plants - not his specialty. He doesn't understand the secret lives of plants. Not like us."



Kirk glanced at the hygrometer and thermometer unit. It seemed hotter and more humid than the dials said.

“Don’t let work get you down. Work to live, not the other way round. Isn’t that what you believe?” she said, green eyes betraying no emotion Kirk could read. All the time she kept the leaf in her hand.

“I suppose,” he said. “Do you want to come into the house? A drink?”

At last, she let go of the leaf. Then she pulled a scanner out of her bag and pointed it at the shrub. “Risky strategy, keeping it in here. Bold, though. Effective too - for as long as it worked.”

He felt his head bow, just like that of the man with the dogwood who they’d arrested.

“I’m afraid I followed you, when you left work,” she said, “You reacted a bit obviously to my message, I thought. Led me straight here.”

“You?”

She reached into her bag and brought out a mini spray gun. “You could spray this plant with pesticide. Remove the blot on your copy-book.” She held the gun out toward him.

The knife in his hands, behind his back, was still open, still sharp. It had tasted blood once today. The realization that he would kill to protect the plant staggered him. His shoulders lifted, his spine straightened. “I wouldn’t do anything to harm it,” he said. “And I won’t let anyone else do anything to it either.”

He held the knife in front of him, menacingly. Olwyn smiled.

“Good. I had to check, though,” she said, putting the spray gun back into her bag. “I wouldn’t do anything to harm it either. As I said, I’ve one very similar - a bit older though. It’s a good thing it’s only me who suspected.”

Kirk folded the knife blade back into the handle.

“If you need a place to transplant this tree,” she said, “I’ve plenty of room at my place. Acres. We could take it now. Or any time you want. No hurry. It’ll be fine here for a couple of years yet.”

“That’d be . . . good.”

“One thing. Go back to work tomorrow. We’ve appearances to keep up. Specimens to collect when no one’s looking,” she reached into her bag and pulled out a plastic wrapper with cuttings of dogwood and

wild rose. She gave them to him and he felt whisperings of sentience, a confusion of chatter as he touched them.

“From yesterday’s bust?”

“Yes. Grow them on, take more cuttings. Let them seed and release the seeds after you’ve sprayed wherever your next job is - sprayed sites are relatively safe havens. Take samples whenever you can before you spray. Mix your sprays wrong, make them weak, just use water if you can. But keep your head down, melt into the background, just get on with it. The perks of the job can be strange and satisfying.

“You won’t be alone. Partners?”

“Partners,” he said.

She took his hand and looked at the cut. Then she rummaged in her bag again and held out a small box. “Grow your own,” the writing on the side said. He accepted the package and read the label’s small print. “These kits have been very, very illegal for years,” he said.

“The enzymes aren’t past their expiration date, though,” she said. “Use the blood from that cut, sequence your genes, and spread ripples through the new gene pool. Muddy those patents.”

He looked at the tray of medlar seedlings he had struck. So did Olwyn. “My husband and I never had kids,” she said. “Until after he died. Now we’ve hundreds. Grandchildren too, all spreading viable transgenic seeds into the wild.”

He opened the kit, broke the seal on a sterile tube of clear liquid, and squeezed a drop of blood into it. He shook the tube, held it up against the light and peered through the rose-colored vial as the floodgates to the future opened and a thousand possibilities rushed to meet him.

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