



Biotech Daily

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Daily news on ASX-listed biotechnology companies

All The Dope On Medicine, Marijuana, Cannabis & Hemp

A Biotech Daily Special Edition

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History was made, without fuss or fanfare and without protest or celebration, on Wednesday February 24 2016, when Australia's then Minister for Health Sussan Ley declared: "The Federal Parliament today passed the Turnbull Government's historic legislation delivering the 'missing piece' for Australian patients and their doctors to access a safe, legal and reliable supply of medicinal cannabis products for the management of painful and chronic conditions."

She added, "This is an historic day for Australia... and will now see seamless access to locally-produced medicinal cannabis products from farm to pharmacy."

Victoria followed, becoming the first state to legalize 'medicinal cannabis' on April 12, 2016, followed by New South Wales and Western Australia, also in 2016, with Queensland and Tasmania coming on-line in 2017.

Further easing of marijuana laws occurred on September 25, 2019, when the Australian Capital Territory Legislative Assembly voted to legalize possession by adults of up to 50 grams (1.8 ounces) of dried marijuana and cultivation of two marijuana plants per person - no more than four per household - beginning January 31, 2020. There are numerous other conditions, too many to list here.

The dreaded devil's weed from hell – marijuana, marihuana, mary jane, cannabis, muggles, pot, dope, grass, weed, reefers, tea, Mary Jane, Caribbean cabbage, wacky tobacco, konopie, bhong, herb, whatever – has been around for about 10,000 years, mostly as a medicine.

The term 'cannabis' was derived from the Thracians who emerged on the scene in about 1,000 BC. The term was modified by Persians, then by ancient Greeks, and subsequently segued into Latin.

An early Germanic word, possibly predating Grimm's Law (on word sounds), morphed into the old English term 'hemp' which became 'Indian hemp' in the US in the 1800s. The term 'marijuana' is Mexican-Spanish, and was popularized in the US in the 1930s.

Restrictions on medicinal Indian hemp in the US first emerged in New York after fears that, like the current opioid crisis, patent medicines using hemp were being used as intoxicants. Local laws in many states followed in the 1910s and 1920s. In 1925 the US supported regulation of Indian hemp as a drug at the International Opium Convention.

Indian hemp was then demonized in the US as marijuana, an evil insinuated into white America by Mexican immigrants and the scourge of black jazz musicians.

The propaganda was the work of Harry Anslinger in a campaign that began about 1936.

Anslinger became the founding commissioner of the US Treasury's Federal Bureau of Narcotics in 1930, and in March 1933 he claimed that hemp or cannabis was harmless and not a problem, noting "There is probably no more absurd fallacy, than the notion it makes people violent."

Not long after that statement, alcohol prohibition ended in December 1933 and vast investigative bureaucracies needed something new to investigate.

Enter Mexican marihuana.

Anslinger's Bureau requested Congress to pass new laws putting marihuana under federal control and, by 1937, Anslinger's innocent hemp became menacing marijuana.

"By the tons it is coming into this country," he thundered on radio, "The deadly, dreadful poison that racks and tears not only the body, but the very heart and soul of every human being who once becomes a slave to it in any of its cruel and devastating forms."

Colonial history

Hemp seeds were brought to Australia with the First Fleet at the behest of Sir Joseph Banks, a noted naturalist and hashish distributor to the London literati, who saw Australia as an ideal 'hemp colony'.

In 1802, New South Wales Governor Philip King wrote to Banks saying he'd sown 10 acres of hemp seeds that grew "with utmost luxuriance, generally from six to ten feet in height". The hemp was mostly used for rope making, and early Australian governments supported hemp horticulture with land gifts and other grants.

Gradually, the consumption of cannabis in Australia in the 19th Century – agriculturally, medicinally and otherwise – became widespread.

Author Marcus Clarke helped popularize it. In February 1868, he published a story called Cannabis Indica in the Colonial Monthly. The story is written after he takes hashish in tablet form with a doctor on-hand taking notes. From May 1872 to September 1873, Clarke wrote a weekly column for a publication called Noah's Ark, featuring a character called Dr Cannabis.

On New Year's Day 1915, hashish contributed to Australia's first homeland 'terrorist' action, when two hashish-crazed Turks – one an imam and the other a hashish importer and supplier to Afghan camel drivers – opened fire on a train full of Oddfellows near Broken Hill.

Hundreds of troops and police were brought from Broken Hill and at the end of the skirmish six people lay dead, seven were wounded, and the Afghan camel drivers were wondering where to find their next hashish connection.

Criminalizing cannabis

With the image of cannabis becoming tarnished by that incident and by alarming reports from the US, Australia signed the 1925 Geneva Convention on Opium and Other Drugs that saw the use of cannabis restricted for medicinal and scientific purposes only.

In 1960, a scare campaign by Victorian police warned that marijuana had infiltrated Melbourne, but it took police four years to make their first arrest.

In 1964, Anne Grant, the proprietor of St Kilda coffee lounge, El Sombrero, was sitting in her MG sharing a 'reefer' with her alleged girlfriend, a lesbian prostitute who was also a police informer. The Victorian drug squad - all two of them - swooped and a crafty Grant threw the joint out of the car onto the tram tracks.

Diligent drug squad officer Bernard Delaney, later to become a Federal narc (narcotics officer), found the joint and described the drama in his 1979 book, 'Narc! Inside the Australian Bureau of Narcotics'.

"There it was: the first marijuana cigarette I had ever seen! The sum of my knowledge then was the expression 'reefer' - and that, strictly, marihuana was spelled with a 'j': 'marijuana' ... But there we were: we had captured Grant. We had the evidence. Our first drug bust ..."

Pot arrests became prevalent, policing became draconian and it all came to a head in the mid-1970s. In August 1976 a major bust turned into a Keystone Cops caper when a posse of 30 police, customs and narcotic agents descended on an isolated hippie colony at Cedar Bay in Northern Queensland, using light aircraft, a naval patrol boat, other small craft, 4WD vehicles and a helicopter piloted by Wayne Knight, a former pilot with the CIA-run Air America.

Australia's first marijuana newspaper, the Australasian Weed, was launched in May 1977 and quickly became Australia's most vilified newspaper.*

The Melbourne Age condemned it as 'The Dopey Paper of Death'. the chairman of the Victorian Mental Health Authority called it 'Mind boggling – more than a disaster', the police described it as 'atrocious, barbaric, obscene'. The NSW Premier called for a federal investigation, and the Commonwealth Police Intelligence Bulletin alerted drug enforcement agencies.

Organized crime muscled in on large-scale marijuana cultivation, culminating in the mafia-style assassination of anti-dope crusader and crop informer Donald Mackay** in Griffith NSW in July 1977, followed a few months later by the emergence of the Australian Marijuana Party in the December 1977 Australian Federal Election.

This resulted in the Melbourne Herald reporting: 'Party Puffs Away in Fourth Place' ... "Just what is this over-sized pressure group, formed as early as November last year, really hoping to achieve?" ***

Decriminalizing dope

The notion of medical marijuana re-emerged around the same time, promoted by marijuana activists who saw it as softening the image and acting as a backdoor to full legalization, and also promulgated by New Agers as an 'alternative' medicine.

In 1996, Judy Canales, a self-proclaimed pioneer of 'hempology' and 'secretary of the Star Earth Tribe' published The Tribal Story: A Hippy Handbook, in which she claimed that a natural remedy for asthma was "a puff of cannabis bud".

The notion of medical marijuana softened mainstream media's attitudes as seen in the sympathetic 2004 coverage of Roslyn Bradshaw of Rockhampton, Queensland, the 45-year-old "shrinking granny" who smoked pot for chronic intestinal pain and who had been arrested so many times that she handed her pot to police when they knocked on her door.

Hippie users also widely touted marijuana as an appetite enhancer, saying it gave them the "munchies". In 1997, shortly after former ABC Triple J announcer Helen Razer was busted for marijuana, King's Cross café Hard Coffee ran an advertisement announcing it was "Where Helen Razer should go when she's got the munchies."

The ASX-listed medical marijuana mania

Australia has one of the highest prevalence rates of cannabis recreational use in the world, and until late this year this helped prompt an assumption that the emergent local medical marijuana business sector would not only be globally significant, but possibly globally dominant as the ABC noted in January 2018 with the headline, "Australia aims for global domination of medicinal cannabis market."

In 2015 Business Insider said, "The stock market anticipates medical cannabis will become big business in Australia" and on January 20, 2015, Phytotech (later MMJ Phytotech) became the first medical-grade cannabis company to list on the ASX and said it was positioned to become "the Berkshire Hathaway of cannabis".

In 2016, SBS reported that “Australia's fledgling medicinal cannabis market continues to gain momentum”. The sector gained more traction in 2017, 2018 showed promise and then came early 2019 with what seemed a concomitant surge globally and locally.

The Motley Fool reported, “There wasn't a hotter investment on the planet than marijuana.”

Business seemed to be booming: about a dozen Australian cannabis stocks soared by at least 70 percent in the first quarter of 2019.

In June 2019, Business News Australia, reported, “Australia has become an unlikely hub for the booming global cannabis industry.” The media outlet also noted that unlisted company Cannvalate claimed Australia had the fastest growing medicinal cannabis market in the world.

Fast growing or not, the sector then went to pot. Reality surfaced. In October, Biotech Daily's Tim Boreham noted that the sector wasn't really delivering.

“As the only member of ‘Cannabis Corner’ with a respectable revenue and earnings track record, [Elixinol Global] is a unicorn stock in a sector that is yet to live up to its promises,” he wrote.

Biotech Daily itself noted, “The 18 Cannabis Corner companies tumbled 29.4 percent in October, down 42.3 percent from the July 31 high of \$1,913 million to \$1,103 million.”

Also in October, The Motley Fool reported, ‘The cannabis collapse: ASX marijuana shares going cheap’. The Fool added: “The gloss has well and truly come off cannabis stocks, as it seems the next big thing has become passé.”

Come November, Biotech Daily publisher David Langsam noted: “The marijuana bubble seems to have burst with what finance people call ‘more realistic valuations’.”

According to Biotech Daily: “The 18 Cannabis Corner companies mislaid a further 16.2 percent in November, to a collective value of less than \$1 billion from the illusory high of \$1,913 million on July 31, 2019, to the lowest level since November 30, 2017.”

Despite early optimism, the sector had never really been buoyant and is home to mostly over-hyped penny dreadfuls with flat trading rates - take for example MGC Pharmaceuticals' trading history.

In February 2016, SBS reported that MGC Pharma had listed on the ASX via a reverse takeover and it saw “its share price jump on opening and rise another 27 percent the next day” - to 3.3 cents.

At November-end this year, MGC's price was ... 3.3 cents.

On December 3, news that the Irish Ministry of Health has approved the sale of MGC Pharma's cannabinoid-based Cannepil for drug-resistant epilepsy raised MGC's price ... to 3.4 cents. And then it fell back to 3.3 cents.

Earlier this month, stockbrokers Morgan's summed up the state of play, "We view the medical cannabis industry as a crowded trade and difficult space to navigate in the current regulatory environment. Low levels of differentiation, slow moving regulation, weak clinical evidence of efficacy, and expensive treatment costs compared to [Pharmaceutical Benefits Scheme]-covered medicine makes it a slower moving proposition compared to traditional drug assets."

Market response also slowed with the decline in perceived value of licences following a rash of issuance: at October 31, 2019 the Federal Office of Drug Control had issued 18 medical cannabis licences, eight cannabis research licences, 21 manufacture licences, and 22 importation licences.

Why Israel?

Incidentally, most of the ASX listed medicinal cannabis companies have Israelis as directors, advisors or executives, possibly because Israel has led medical marijuana research since medicinal chemist Prof Raphael Mechoulam first isolated and synthesized tetra-hydro-cannabinol (THC) in 1964, 50 years ahead of all the new discovery companies.

A bud by any other name gets you just as stoned

Also holding back the sector is the wariness of the 'gatekeepers', the physicians who remain leery, resulting in only a small number actively prescribing.

And what's holding them back? A number of factors beginning with the taint of raffishness and illegality associated with cannabis for the last century or so.

Plus, confusion about nomenclature, with terms such as hemp, marijuana or cannabis being bandied about. As the pollen settles on this score, cannabis is emerging as the global lingua franca, with marijuana becoming an aberrant term mainly deployed by Americans and to some extent Australians, but with the terms being interchangeable.

Cannabis commercialization has also confused taxonomical distinctions between cannabis species and subspecies, and new research has questioned the differences.

Traditional cannabis culture acknowledged two species: cannabis sativa, regarded as uplifting and psychoactive', and indica, said to be sedating. Then came hybrids, said to contain qualities of both indica and sativa.

It is believed there is little evidence to suggest indicas and sativas exhibit a consistent pattern of chemical profiles and differences. And just how different indica and sativa truly are is also now in debate, with Leafy reporting, "While sativa and indica cannabis strains look and grow differently, this distinction is primarily only useful to cannabis cultivators.

"But if you look at the chemical 'ingredients' inside of indicas and sativas - that is, terpenes and cannabinoids - you'll notice there aren't clear patterns to explain why one type would be inherently sedating and the other uplifting."

In 2015, medical researcher and former University of Melbourne vice-chancellor Prof David Penington said that “cannabis can never be a pharmaceutical agent in the usual sense for medical prescription, as it contains a variety of components of variable potency and actions, depending on its origin, preparation and route of administration” adding that cannabis had variable effects in individuals and it would not be possible to determine universally safe dosage of cannabis for individuals based on a clinical trial.

Then there’s the bewilderingly intricate maze of non-medico-friendly regulations pertaining to medical cannabis, what can and cannot be prescribed and how, restrictions of advertising or referring services - the list is long and grows voraciously.

In March 2018 media-darling Prof David Caldicott, clinical lead at the Australian National University’s Australian Medicinal Cannabis Observatory, told the ABC that many people bypass general practitioners in favor of growing their own.

“The regulations in place to facilitate medical cannabis access are so arcane that people find it considerably easier to score their medication illegally,” he said.

Indications, illusions and delusions

Then there’s the bewildering list of what cannabis possibly might or might not be able to treat, and what chemical components of cannabis or extracts of cannabis or cannabis oil might possibly cure, a list that dates back to 1213 BC when Egyptians recorded using cannabis for glaucoma, inflammation and for enemas, to recently when proponents of cannabis ‘tampons’ said, “Women’s cramps can disappear within 20 minutes.”

At October 31 this year, Australia’s Therapeutic Goods Administration had approved more than 20,300 special access scheme (SAS) category B applications for unapproved medicinal cannabis products including, but not limited to: chemotherapy-induced nausea and vomiting, refractory paediatric epilepsy, palliative care indications, cancer pain, neuropathic pain, spasticity from neurological conditions, and anorexia and wasting associated with chronic illness (such as cancer). SAS applications spiked recently: October 2018 saw 331 applications, in July this year there were 2,206, followed by 3,594 applications in October.

While cannabis can’t cure cancer, it can reportedly alleviate pain associated with cancer and ease chemotherapy induced nausea. Cannabis can’t cure epilepsy, but it can be beneficial in treating epileptic seizures, especially among children.

In May, the US Epilepsy Foundation pointed out that the use of cannabis to treat epilepsy and other neurological conditions has been studied for a number of years and hotly debated.

After reviewing literature about whether cannabidiol (CBD) could potentially help control epileptic seizures, the foundation concluded, “In recent years, a number of studies have shown the benefit of specific plant-based CBD product in treating specific groups of people with epilepsy who have not responded to traditional therapies.”

This year the Journal of the American Medical Association published an overview of cannabis and its medical uses.

The journal said, “Although nearly 10 percent of cannabis users in the US report using it for medicinal purposes, there is insufficient evidence to support the use of medical cannabis for most conditions for which its use is advocated or advised. However, there is an increase in favoring the public availability of cannabis, largely for the management of more than 50 medical conditions.”

Incidentally the journal also revealed cannabis can treat cannabis dependency, that the use of cannabinoid agonist medication - namely nabiximol, a combination of tetrahydrocannabinol (THC) and cannabidiol - “appears to be a promising addition to the treatment of patients with cannabis dependence.”

Perhaps the Medical Journal of Australia best summed up the state of play in August 2018: “Community support for prescribed medical cannabis continues to grow, possibly influenced by media reporting; surveys of patients with chronic pain, cancer, and epilepsy have found that considerable numbers of Australians have either used (10% to 20%) or would consider using cannabis products for therapeutic purposes. However, knowledge of the unregulated use of medical cannabis in Australia remains imprecise because it is generally illegal.”

Some of the problems hindering the medicinal cannabis sector may be overcome with the announcement, last month, that a Parliamentary Inquiry will scrutinize barriers confronting patients trying to access medicinal cannabis in Australia

The Greens push for an inquiry into access to the drug passed the Australian Senate in mid-November after the Greens said the medicinal cannabis system was “broken” and in urgent need of reform.

Market forecast: watch this space. Medicinal cannabis investments will grow in time, but the investing ‘landscape’ will differ greatly from today.

* The writer of this article was the publisher and editor of the Australasian Weed

** The writer was questioned by police in regard to this matter and asked to give an alibi.

By eerie coincidence, years later it was discovered that the hit man who killed Mackay had been a two-doors-down neighbor of the writer in the Melbourne suburb of Carlton several years before the murder.

*** The writer was the co-founder of the Australian Marijuana Party and stood as Senate candidate JJ McRoach in the 1977 Australian Federal Election. Biotech Daily editor David Langsam was his campaign director.

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