

# Medicinal versus recreational cannabis

In countries that allow the legal cultivation of cannabis for both medicinal and recreational use, the legislation governing production of the crop for medicinal use is far more stringent than that for recreational cannabis.



## BY THOMAS WALKER

Thomas Walker is the founder of Walker Cultivation, a consulting firm specialising in commercial cannabis production and extraction.

Email him at [thomas@walkercultivation.com](mailto:thomas@walkercultivation.com), or at [farmersweekly@caxton.co.za](mailto:farmersweekly@caxton.co.za). Subject line: Cannabis post.

The main object of cultivating medicinal cannabis is to attain the maximum concentrations of cannabinoids and/or terpenes within the bud, as this commands higher prices. For recreational users, the most important factors determining quality are the look or 'bag appeal' of the bud, the smell, and the psychoactive effect when used.

Typically, when producing cannabis for medicinal purposes, the cannabinoids or terpenes are extracted using supercritical carbon dioxide, ethanol, hydrocarbon, or solventless extraction into oils or distillates. This enables manufacturers to create the final product easily.

Regulatory compliance is crucial when growing medicinal cannabis, and the standards required can be very strict, depending on where the grower is located. For example, a medicinal product derived from cannabis destined for Europe will need EU Good Agricultural and Collection Practice for the cultivation facility and EU Good Manufacturing Practice for the processing facility. Obtaining these certifications can run into millions of rands.

## MECHANISATION

Usually, medical companies seek to isolate a molecule and put it into a pill form. However, when we consume cannabis, our bodies absorb a multitude of botanical compounds. Each has its effects and benefits, and its behaviour can change in the presence of other compounds. Similarly, when poorly understood compounds are removed, the efficacy of the cannabis can be reduced.

The overall look and quality of the bud is not the driving force for medicinal producers and this is why there are differences in production. Medicinal buds are usually trimmed by machines, which have a much higher output and reduce labour costs. The downside is that the trimmers often cut the buds while trimming the leaves, leading to scruffy-looking buds. The finished product can also contain leaves.

Most consumers of recreational cannabis want a high-quality flower/bud or concentrate that will result in the desired psychoactive effect when used. The production of high-end recreational cannabis is usually conducted indoors

in sealed environments. This enables producers to have full control of the environment, thereby increasing the yield, consistency, and quality of the end product. Trimming of the bud is usually done by hand, which provides a far better finish.

Recreational buds can also be cultivated in a greenhouse or outdoors, although the quality and prices are significantly lower than for indoor buds.

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Outdoor and greenhouse cannabis is ideal for the production of concentrates such as hash and vape juices. Typically, a 10:1 ratio of bud-to-concentrate is produced when extracting for crude oil. This means that cost of production is an important factor to consider when producing buds for concentrates, as 10g of quality buds will make 1g of crude oil.

Compliance for the production of recreational cannabis is far less stringent than that for medicinal cannabis and usually includes set limits for allowable percentages of heavy metals, pathogens and pesticides.

## ONLY WAY

There are no clear answers on whether it is better to produce cannabis for medicinal or recreational use, as they are targeted at different users. Medicinal cannabis production aims to provide the efficacy and standardisation of a medicinal product to treat medical issues. Recreational cannabis production, in a nutshell, aims to grow the best-quality product for people who want to elevate their mood.

The only way to produce cannabis commercially in a newly legislated country such as South Africa is to start with medicinal cultivation, as this is the route most countries follow before implementing a recreational licensing structure. ■ FW