CLAIMS

1. A process for producing a genetically modified *Cannabis* seed that germinates into a plant, the process comprising:

(a) preparing a cell culture comprising genetically engineered *cannabis* cells having at least one gene ~~that expresses a psychoactive cannabinoid~~ deleted, wherein the at least one gene is a gene that expresses a psychoactive cannabinoid selected from the group consisting of THCA, THC, THCVA and THCV;

(b) establishing a callus culture for forming a somatic embryo;

(c) forming a bio-ink comprising the somatic embryo; and

(d) three-dimensional (3D) printing the seed.

2. The process according to claim 1, wherein step (a) comprises obtaining cells from a wild-type *Cannabis* plant and genetically deleting the at least one gene that express psychoactive cannabinoids, wherein the *Cannabis* plant contains a high level of CBDV content.

~~3. The process according to claim 2, wherein the at least one gene that expresses a psychoactive cannabinoid deleted is a gene that encodes for a psychoactive cannabinoid selected from the group consisting of THCA, THC, THCVA and THCV.~~

~~4~~3. The process according to claim ~~3~~2, wherein the gene is the THCA synthase gene.

~~5~~4. The process according to any one of the preceding claims, further comprising the step of replacing the at least one gene that expresses a psychoactive cannabinoid with a reporter gene.

~~6~~5. The process according to claim ~~5~~4, wherein the at least one reporter gene further comprises a detectable label.

~~7~~6. The process according to any one of claims ~~5~~ 4 or ~~6~~5, wherein the reporter gene is the firefly luciferase gene.

~~8~~7. The process according to any one of the preceding claims, further comprising encapsulating the somatic embryo prior to the 3D printing step (d).

~~9~~8. The process according to any one of the preceding claims, wherein the step (d) prints a seed having a shape other than that of a naturally occurring wild type *cannabis* seed.

~~10. A genetically modified *Cannabis* seed that germinates into a plant, wherein the seed has a shape other than that of a naturally occurring wild type *cannabis* seed.~~

~~11. A plant produced from a seed produced by a process according to any one of claims 1 to 9, or from a seed according to claim 10.~~