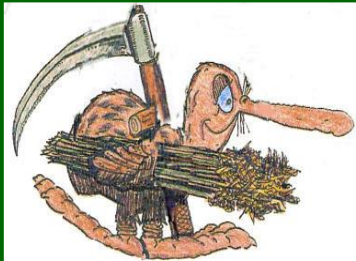


**HempSeed Holdings Ltd
and Aotearoa1
present
THE ONLY GENERIC
ACCLIMATIZED APPROVED
AOTEAROA NZ Industrial
hemp cultivars**



HEMPSEED HOLDINGS LTD

(NZHIA) member 1990 >

And the Aotearoa NZ S.O.W. Hemp Collective



4/19/2021

AOTEAROA1 Cultivar description plus sub cultivars

Owned by Hempseed Holdings Ltd Shareholders
Mack has already created the only four approved acclimatized Generic New Zealand industrial hemp cultivars:

1. Aotearoa 1, 29th July 2008 and
2. A1 Monopurp 26 February 2019.
3. A1 Comseed and
4. A1 MACMono have been submitted for approved status 2020. Both approved 30 June 2020
5. A1 HCFX was submitted seeking approved status March 2021

AOTEAROA1

Cultivar Characteristics

Cannabis Sativa – approved 31 July 2006

Dioecious Seed Fiber production.

Aotearoa1 is the base seedstock for all subsequent cultivar's

It is a better than average cultivar in the breeders view

However it shows more variation than all other A1 cultivars.



A good crop of AOTEAROA1



AOTEAROA1 SEED BREEDING LINES

MONOPURP

Aotearoa1 Monopurp are monoecious, turning dark purple, strong growth, disease & frost resistant, larger heavy seed, good leaf matter & seed ratio *i.e.* not too much and open, leaf matter. Medium tall (1.5m @ 46.28S) (Broad Acre)

Each seed is distinct and aerated reducing mould, fungus and headrot risk. Very frost-resistant and overall hardy. The hardest line of them all to date.

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A1 Monopurp





A1 MONOPURP
Cannabis Sativa
Dioecious mildly
Monoecious. Goes
purple and eventually
black late in the growth
cycle. Mainly for seed
oil production.

AOTEAROA1

Dioecious Hemp = Male and female separate plants



FEMALE

MALE

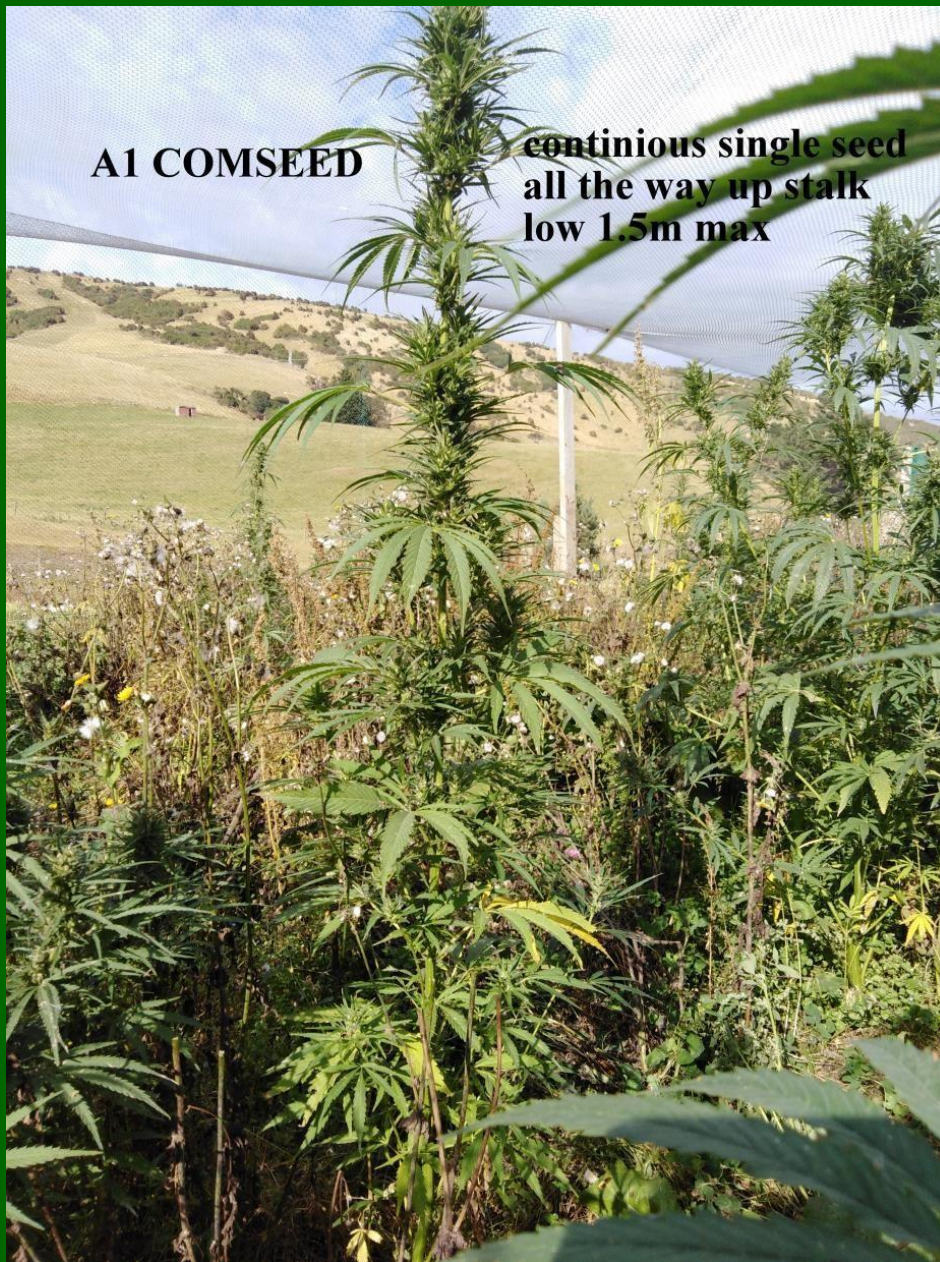
AOTEAROA 1 Harvest 2006 by Neville Shaw Case 600-Contractor/Farmer 1ha = many tonnes



HEMP COTTAGE FARM



Cannabis Sativa – Highly
MONOECIOUS
A1 MACMono ie
Commercial seedstock for
broad
acre farmers and market
Garden
regime of cultivation. Seed
-
Fibre Oil production
Suitable for traditional
Broad acre
Farmers but specifically
suitable for
Market Garden Regime of
production.
High seed yielding multi-
branched



A1 COMSEED

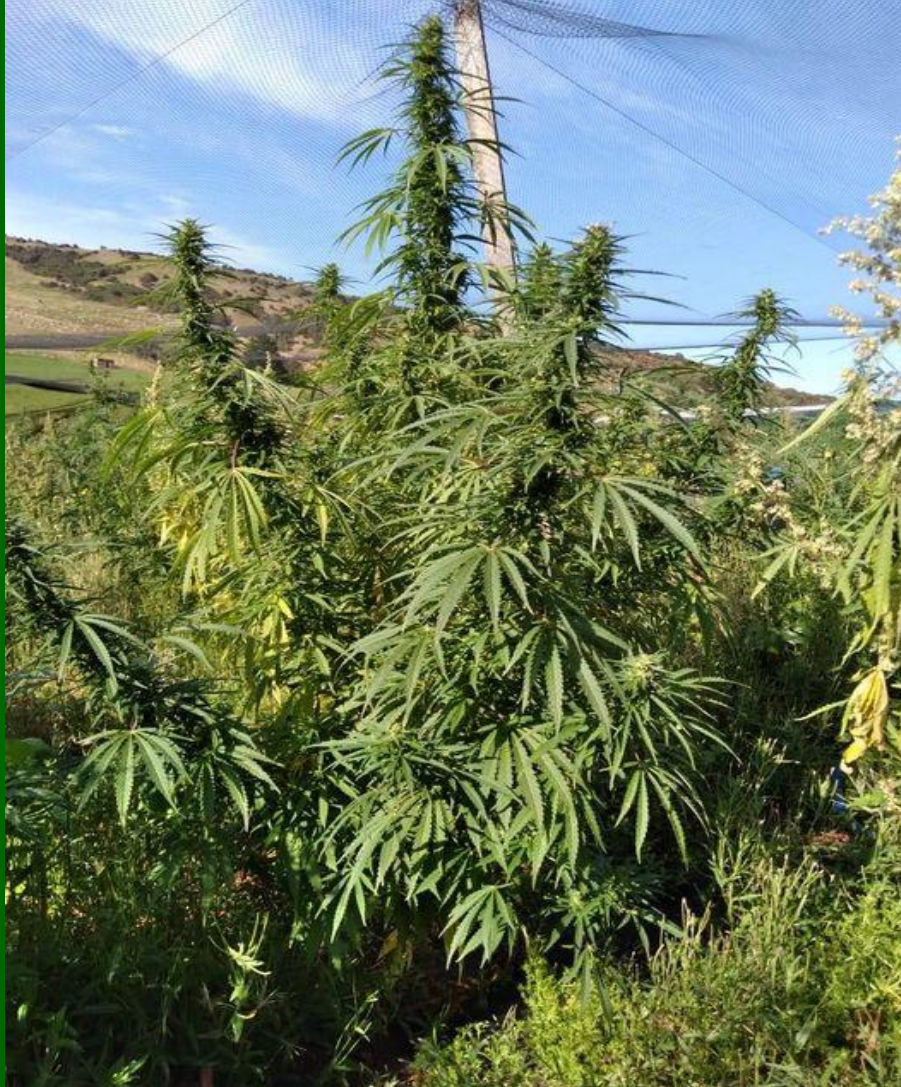
continious single seed
all the way up stalk
low 1.5m max

Cannabis Sativa – Dioecious
A1 COMSEED ie Commercial
seedstock for broad acre farmers.
Seed - Fibre production
Suitable for traditional Broad acre
Farmers

Breeder has not grown in broad
acre context however it should be
very useful in that it has one stalk
only, low ie 1.2 m – 1.5 m at ie 20
–40 ppms, breeders location; very
heavy seeder

- *A1 HCFX Cultivar Characteristics*
- *Dioecious*
- *Name A1 HCFX* this is the best of Aotearoa 1 over 12 year period with focus on number of seed heads and seed weight per plant. Therefore there is not a lot to state re the plant in that it is essentially super Aotearoa1 ie A1 HCFX has been grown for an extended period in Aotearoa NZ but I wanted it as close to perfect as I could get it so its taken until now to make formal application.
- **Height: @ 46.28 S just over 2 meters ie quite tall for the base genetics.**
- **Genetic sequencing: (parents) Aotearoa1 entirely.**

A1 HCFX the A1 super cultivar



HEMPSEED HOLDINGS



4/19/2021

CROP AND PRODUCTS



HCF TAWANUI Hemp Site

HCF 1 ha
Industrial
Hemp
Research/
Produce site

46.28 South
Height above
Sea level
280 feet



AOTEAROA1 SEED BREEDING LINES

- Associate Professor John Mcpartland
- Massey Uni Fruits Crops Unit



2024 1 22

HEMP SEED HOLDINGS

AOTEAROA1 SEED BREEDING LINES COMSEED

All plants are bright vibrant green, single seed head with heavy seed 70% length thereof. No side branches; dioecious. Very disease and frost resistant. Hardy and resilient. No moth caterpillar predation. Not much over a meter tall but higher producer than many twice that.



AOTEAROA1 SEED BREEDING LINES

HCFX

- Large multi-branched heavy seeding plant. Frost, disease, pest resistant. Goes deep green with feeding.
- Large heavy well-aerated seeds. Vigorous growth continuously creating new branches up to 30 naturally. If cut back pre-seed head formation up to 45 seed heads average.
- Probably most suited to the Market Garden Regime of individual plant husbandry.
- Seed weight per plant is significantly above all other potential lines in MGR spacing.
- Very consistent look. Consistent 1.8 – 2m. Avg 1kg per plant



Cultivar Breeding Intent:

- Continue Developing Cultivar lines with specific products and participants in mind.



UN SINGLE TREATY CONVENTION SPECIFICALLY EXCLUDES IHEMP THEREFORE IMMEDIATELY LEGALIZE IHEMP AS ITS NOT A DRUG; PERIOD.

Article 28

CONTROL OF CANNABIS

1. If a Party permits the cultivation of the cannabis plant for the production of cannabis or cannabis resin, it shall apply thereto the system of controls as provided in article 23 respecting the control of the opium poppy.
2. This Convention shall not apply to the cultivation of the cannabis plant exclusively for industrial purposes (fibre and seed) or horticultural purposes.
3. The Parties shall adopt such measures as may be necessary to prevent the misuse of, and illicit traffic in, the leaves of the cannabis plant.

OVERALL FOCUS INTENT

- Legalize ihemp immediately and totally remove from MODA and any influence whatever from MOH.
- ENSURE that it has stand alone legislation totally outside MOH MODA and allowing all revenue streams including sales OF RAW MATERIAL TO ANY COMPANY FOR ANY PURPOSE THAT'S LEGAL.
- Define it in separate legislation as legal with a cultivar the limit not above 1%
- Ensure all contents naturally occurring are legal INCLUDING BUT NOT LIMITED TO CB'S TERPENES FLAVONOIDS