croplogic™

Science | Agronomy | Technology
New Zealand | Australia | USA

ASX Announcement

For personal use only

13 September 2019

Hemp Trial Farm Enters Fourth Stage of Development – Flowering

Highlights

- **Hemp Trial Farm enters Fourth Development Stage with flowering now underway**
- **Suggesting genetics are reacting well to CropLogic farm and growing methodologies**
- **Example of CropLogic applied agronomy, farm management and agtech expertise**
- **Success over several trial plots – methodologies learned build agronomy, farm management and agtech business and can be applied to future potential expansion**
- **Progressing to compliance testing and then harvest**

CropLogic Limited (ASX: CLI) **(CropLogic** or **Company)**, award-winning global agronomy, farm management and agtech company, is pleased to announce that its Hemp Trial Farm in Central Oregon has **entered the fourth stage of development as the plants have begun to flower**. Flowering is a significant milestone for the Hemp Trial Farm as it is in the flowers that the CBD producing oils are predominantly found.

CropLogic CEO James Cooper-Jones:

"CropLogic is encouraged to see its agronomy, farm management and agtech expertise come together in this manner as the Hemp Trial Farm moves to the fourth stage of flowering.

"This adds greatly to not only our Hemp Trial Farm but the ability of CropLogic to offer this agronomy, farm management and agtech expertise to the hemp industry generally."

The eight stages of hemp farming

Logical Cropping's farm plan consists of eight stages, based on the needs of the farm and plants.

These various stages of the farm plan are (with indicative timeline):

✓	Pre-planting	**Completed**
✓	Planting	**Completed**
✓	Growth, Maintenance & Management	**Underway**
✓	Flowering	**Commenced**
•	Compliance Testing	Sept
•	Harvest	Sept - Oct
•	Processing/Sale	Oct – Nov
•	Post-harvest	Nov – Dec

Agronomic Methodologies Employed

CropLogic has employed growing methodologies to encourage the development of flowers; principally employing a non-competition methodology of crop spacing and growing sometimes called the Christmas Tree approach as the hemp plant grows in a shape similar to a Christmas Tree.

For personal use only

In investigating industrial hemp, CropLogic determined that hemp has a tendency, like many plants, to stop spreading out and grow higher when it touches or senses a neighbouring plant.

Figure 1: An example of a field where the hemp for fibre methodology of close spacing is used. Note the long, slender plants, limited laterals (branches) and limited flowers.

This is not a CropLogic field.

Industrial hemp has historically been developed for fibre. The fibre is predominantly located in the stalk of the hemp plant and plants are grown in close plant spacings and touching their neighbour. Plants grown in this manner typically have longer stalks, are slender and have limited branches (laterals) with genetics and then plant spacing being strong contributing factors to this. Close spacing methodology has thus been popular with hemp for fibre growers.

Maximizing CBD Yield Methodology

'Christmas Tree' Spacing

Hemp plants manner of spreading out is the production of laterals (branches).

Each lateral has the potential to produce flowers and it is in this flower that predominantly the CBD containing oils are found. As such the close spacing methodology for fibre production is less suitable for CBD production and CropLogic has adopted what has become known as the 'Christmas Tree' approach, allowing the plants room to spread out and produce many flower producing laterals.

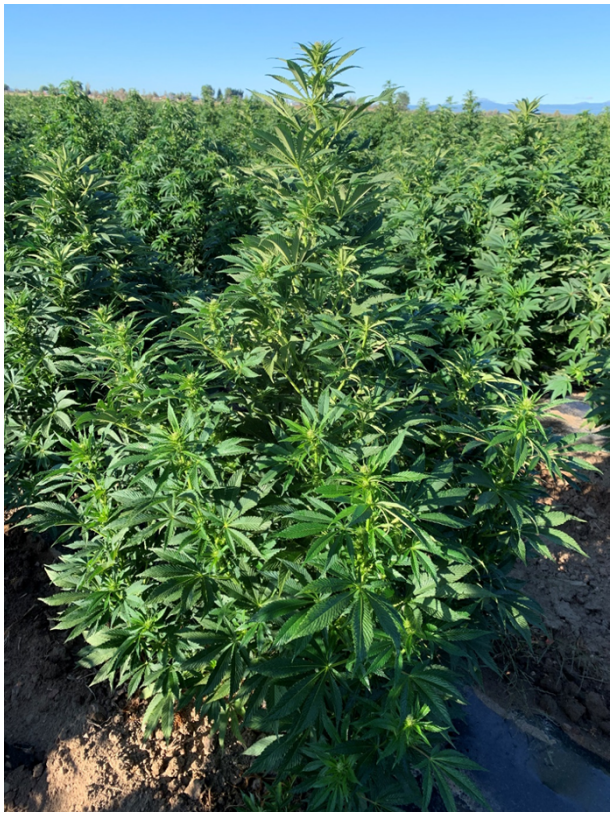


Figure 2: A good example of a hemp plant grown under the 'Christmas Tree' approach. Note the many laterals (branches) and then the buds (flowers) on each of the laterals. CBD producing oils are predominantly found in hemp flowers. Image taken from field Hercules.

This is a CropLogic Field.

For personal use only

Irrigation and Fertigation[1]

Using its agronomy and farm management expertise CropLogic has developed an irrigation and fertigation strategy designed to optimize the plant laterals, flowers and general plant development in the Christmas Tree approach.

This consists of irrigation and fertigation applications that focus on the development of plant mass and structure in the earlier part of the season in developing root systems and plant structure in the form of leaf mass, stalk and laterals. This forms the foundation on which the plant can healthily propagate and develop CBD producing flowers.

Agtech

The CBD Maximising Methodolgy is monitored and further optimized by the use of CropLogic agtech, including CropLogic realTime and CropLogic Aerial Imagery. This allows CropLogic to evaluate the effectiveness of the methodology in season and adapt where necessary.

Figure 3: A CropLogic realTime IFMS unit in field Draco.

Autoflower

A direct seeding autoflower trial has been conducted.

Conventional hemp is photoperiodic meaning it is reliant on the light cycle, generally a 12-hour day of light, before it will flower. A non-photoperiodic variety such as autoflower variety of hemp will flower in a set number of days from planting.

Autoflower plants and their yield are generally smaller than conventional hemp however being less seasonally dependent means there is potential for them producing several crops a year and also providing an opportunity to bring product to market when supply is otherwise limited, and prices are strong.

CropLogic has trialed several acres of autoflower this season. These plants were direct seeded. The results to date have been encouraging and have broadened CropLogic's agronomic and farm management understanding of autoflower and hemp generally. This knowledge will benefit the Company in servicing autoflower fields in the future and autoflower may present a future larger scale option for CropLogic in coming years.

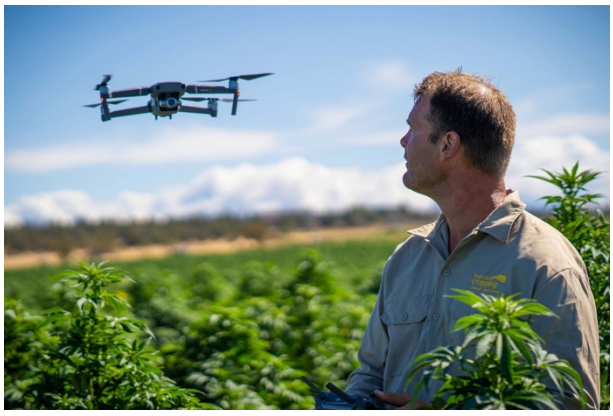


Figure 4: A LogicalCropping team member operating a drone to check the crop in Field Aries.

Agtech is used to optimise the success of the trial farm agronomy and farm management strategies.

Direct Seeding

CropLogic has also trialed direct seeding this season.

The majority of the acres of Hemp Trial Farm have been planted using 'starts' seedlings. which has been a successful method of cropping hemp. However, planting 'starts' comes at a cost and is a more involved method of planting. As such this may present limitations at scale.

[1] **Fertigation** is the injection of fertilizers, used for soil amendments, water amendments and other water-soluble products into an irrigation system.

For personal use only

In conventional agriculture seeds for direct seeding are commonly coated to encourage germination and reduce mortality due to fungi. However coated hemp seeds were not available and as a result germination rates of direct seeding fields of other growers observed were low with fields as low as 50 to 60% germination rates noted.

CropLogic applied its agronomy and farm management expertise to increase germination rates, modifying such things as fertigation and irrigation and monitoring soil temperature. The results of CropLogic's direct seeding trial are encouraging and well above the germination rate of other fields noted.

CropLogic believes that seed coating may have viability in future seasons and assist in reducing costs and increasing the potential to grow to larger scale.

Having also generated results well above those observed on direct seeding fields of other growers, the knowledge gained from this trial will also benefit CropLogic when approaching the hemp market with its agronomy, farm management and agtech services.

A selection of photographs of crop development and flowering can be seen at Appendix A.

"Harvesting of CBD producing hemp at our 500-acre Hemp Trial Farm in Central Oregon is on track to commence late September and run through October." CropLogic CEO James Cooper-Jones, reported in a recent interview with Proactive Investors[2], "Drone footage of the crop shows advanced growth and the plants in flower."

For further information please contact:

James Cooper-Jones

Chief Executive Officer
CropLogic Limited

M: +61 419 978 062

E: james.cooper-jones@croplogic.com

MMR Corporate Services Pty Ltd

Level 2, 131 Macquarie Street
Sydney, NSW 2000 Australia

P: +61 2 9251 7177

E: croplogic@mmrcorporate.com

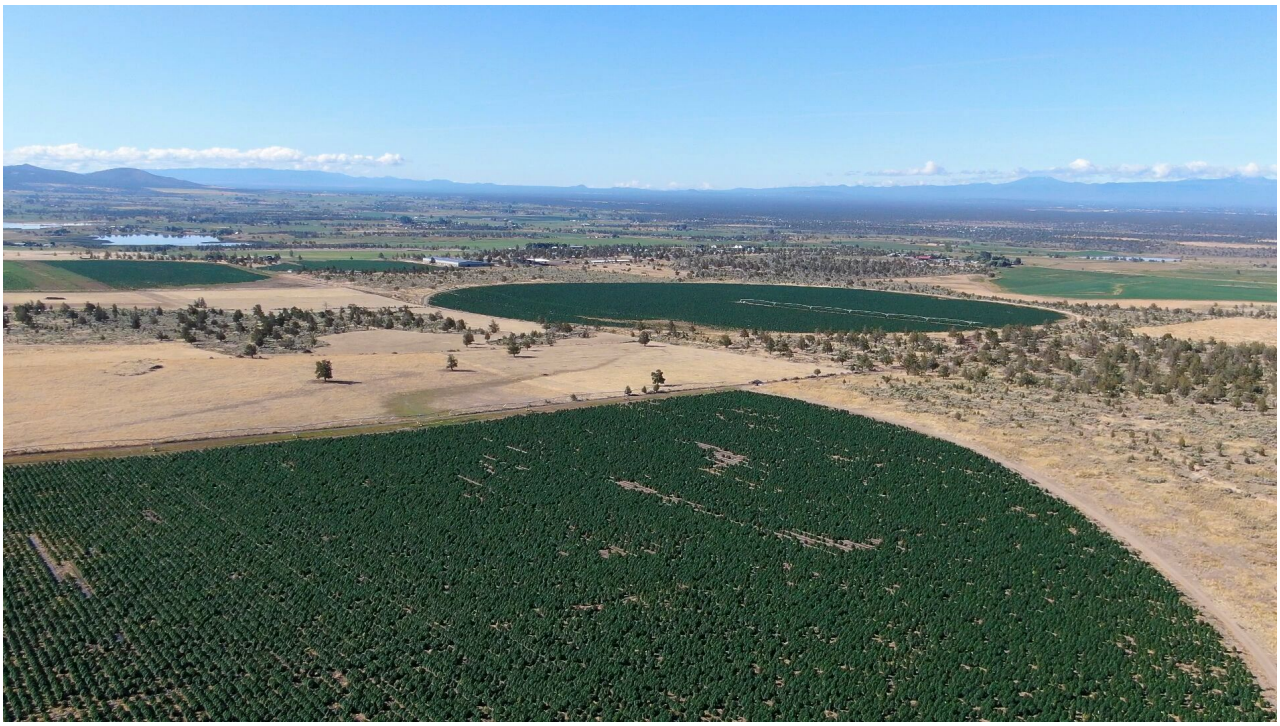
About CropLogic

CropLogic is an award-winning global agricultural technology company listed on the Australian Securities Exchange (ASX). After launching its product into Washington State, USA in 2017, CropLogic is currently servicing a significant portion of horticultural growers in this region, with a market share as high as 30% in some crops. Following significant growth (2017-2018) in Washington State and Northern Oregon, in 2018, CropLogic expanded into the Idaho market. CropLogic offers growers of irrigated crops with digital agricultural technology expertise based upon scientific research and delivered with cutting edge technology – science, agronomy and technology interwoven into an expert system for decision support. For more information, please visit: http://www.croplogic.com/

[2] https://youtu.be/IQz49LD-dKM

For personal use only

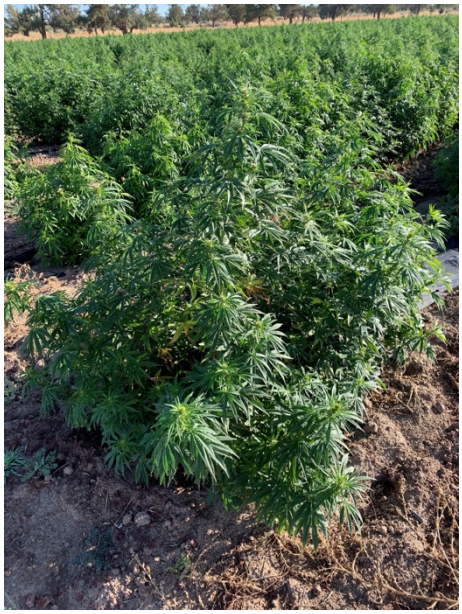
Appendix A

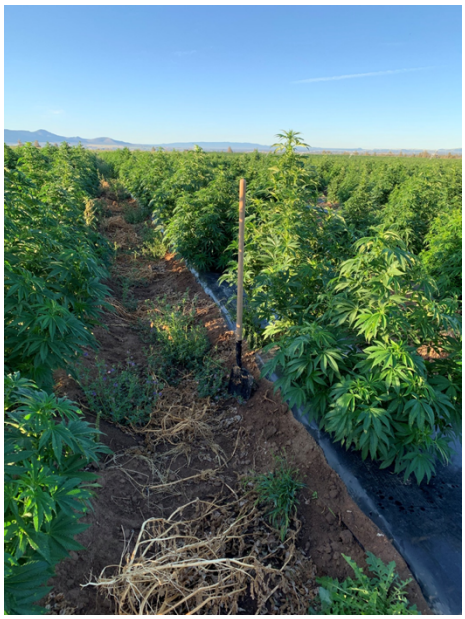


A drone image with field Draco in the fore ground, field Aries in the centre of the image and field Orion to the left of the image.

A drone image of a LogicalCropping employee evaluating crop growth on field Draco.

For personal use only





Left Image: An image of part of the Shephard Joint Venture field. Note the many laterals on this plant with many in the early stage of flower and cola development.

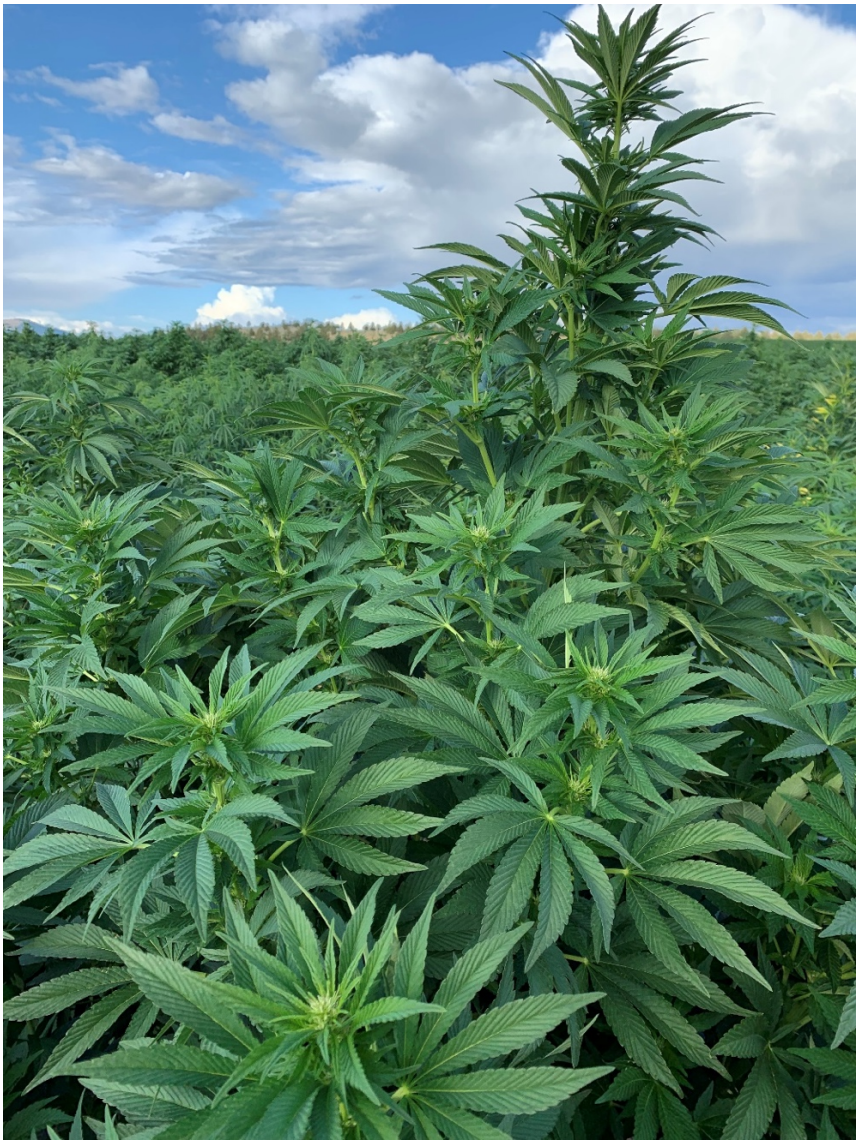
Right Image: An image of part of field Sirius. This image is a good example of the use of mulch plastic in keep weeds off the plant reduce root competition.

Left Image: An image of plant on field Draco showing good flowering in the early stages on both the apical (main) and lateral colas.

Right Image: A close up photo of another good example of a plant grown under the 'Christmas Tree' approach.. Note the primary apical (centre) cola (flowering part of hemp plant), and then lateral colas. This image is from field Sirius

For personal use only

An image of part of Field Draco. The consistency of crop shown in this image demonstrates some of the success from CropLogic's agronomy and farm management strategy, including the use of drip tape and mulch plastic irrigation



A closer image of a plant on field Draco showing the main (apical) cola shooting up above the main plant and this apical cola being surrounded by laterals. Flowers in early stages can clearly be seen on both the apical cola and the laterals. In hemp plants CBD producing oils are predominantly found in flowers, as such CropLogic has used its agronomy and farm management expertise to implement a strategy to optimise flower production.

For personal use only

A close up image of a bud (flower) in early stages of development. A noticeable turpine aroma has been noticed on CropLogic's fields, particularly on field Sirius. Turpines are essential to the develop of CBD producing oils.

An image of an autoflower cola on field Orion. This season CropLogic has trialed several different varietals and growing methods including several acres of autoflower. Autoflower is non-photoperiodic and may potentially present a multi crop a season option in the future.

For personal use only

An image of an apical cola of the berry blossom variety on field Orion. This is a good example of the pink flower that this variety is known for.

Forward Looking Statements

This announcement may contain forward-looking statements that involve risks and uncertainties. Indications of, and guidelines or outlook on, future earnings, distributions or financial position or performance and targets, estimates and assumptions in respect of production, prices, operating costs, results, capital expenditures, reserves and resources are also forward-looking statements. These statements are based on an assessment of present economic and operating conditions, and on a number of assumptions and estimates regarding future events and actions that, while considered reasonable as at the date of this announcement and are expected to take place, are inherently subject to significant technical, business, economic, competitive, political and social uncertainties and contingencies. Such forward-looking statements are not guarantees of future performance and involve known and unknown risks, uncertainties, assumptions and other important factors, many of which are beyond the control of the Company, the directors and management. We cannot and do not give any assurance that the results, performance or achievements expressed or implied by the forward-looking statements contained in this announcement will actually occur and readers are cautioned not to place undue reliance on these forward- looking statements. These forward-looking statements are subject to various risk factors that could cause actual events or results to differ materially from the events or results estimated, expressed or anticipated in these statements.