

Introduction

- 1. Growing medical cannabis (number of plants, way of creating sustainable growing with light movers, pictures, amount per cycle)
- 2. Breeding strains (working on own Grow high the strain, creating own seed bank and clones bank, improving of plant genetic potential)
- 3. ISO standards consulting (implementing GMP EU standard, GMC thai standard, ISO 20000 certification)
- 4. Developing Acacia CBG genetic programme (breeding CBG strain, creating stable plant high CBG content potential)
- 5. Testing programme (providing chromatography research testing in partnership with Rajamangala technical university Bangkok, terpene profile, pesticides, heavy metals, health harmful hormones. providing potency tests (CBG, THC, CBD, moisture, water activity with Gemma Cert testing machine) Examples of test reports
- 6. Facility (farms) construction consulting. Technical consulting (construction, equipment, fertilizers, seeds). Legal expertise (obtain licenses, construction permits, construction/growing certification)

Outro



INTRODUCTION

At Acacia Trading, we are passionate about helping businesses in the cannabis industry thrive. With a focus on providing top-tier training and marketing services, we are dedicated to empowering our clients with the knowledge and tools necessary to succeed in this dynamic market

Established in Thailand and operating globally, we are committed to delivering exceptional results and exceeding the expectations of every client we serve



GROWING AND DEVELOPING MEDICAL CANNABIS

We focused on the whole production/sales cycle, such as growing, trading, retail.

At present, we have constructed and operate two farms on Koh Samui, Thailand:

Facility/breeding center medium size

Area: 100 square meters;

4 grow tents for the complete cultivation cycle

(32 plants),

1 grow tent for mother plants (8 plants),

1 grow tent for clones (60 plants);

Substrate: coconut;

Irrigation: drip;

Lighting: 600 watts per square meter;

Fertilizers: from local producers; Projected yield: 1.8-2.2 grams/watt

(7-9 kg of high-quality buds)

Facility/laboratory small size:

Area: 25 square meters;

2 grow tents for the complete cultivation cycle

from clones (64 plants); Substrate: mineral wool;

Irrigation: drip;

Lighting: 600 watts per square meter;

Fertilizers: from local producers; Projected yield: 1.8-2.2 grams/watt

(4-5 kg of high-quality buds)

Both facilities are modular, sustainable with the capacity for expansion and deployment in any suitable space



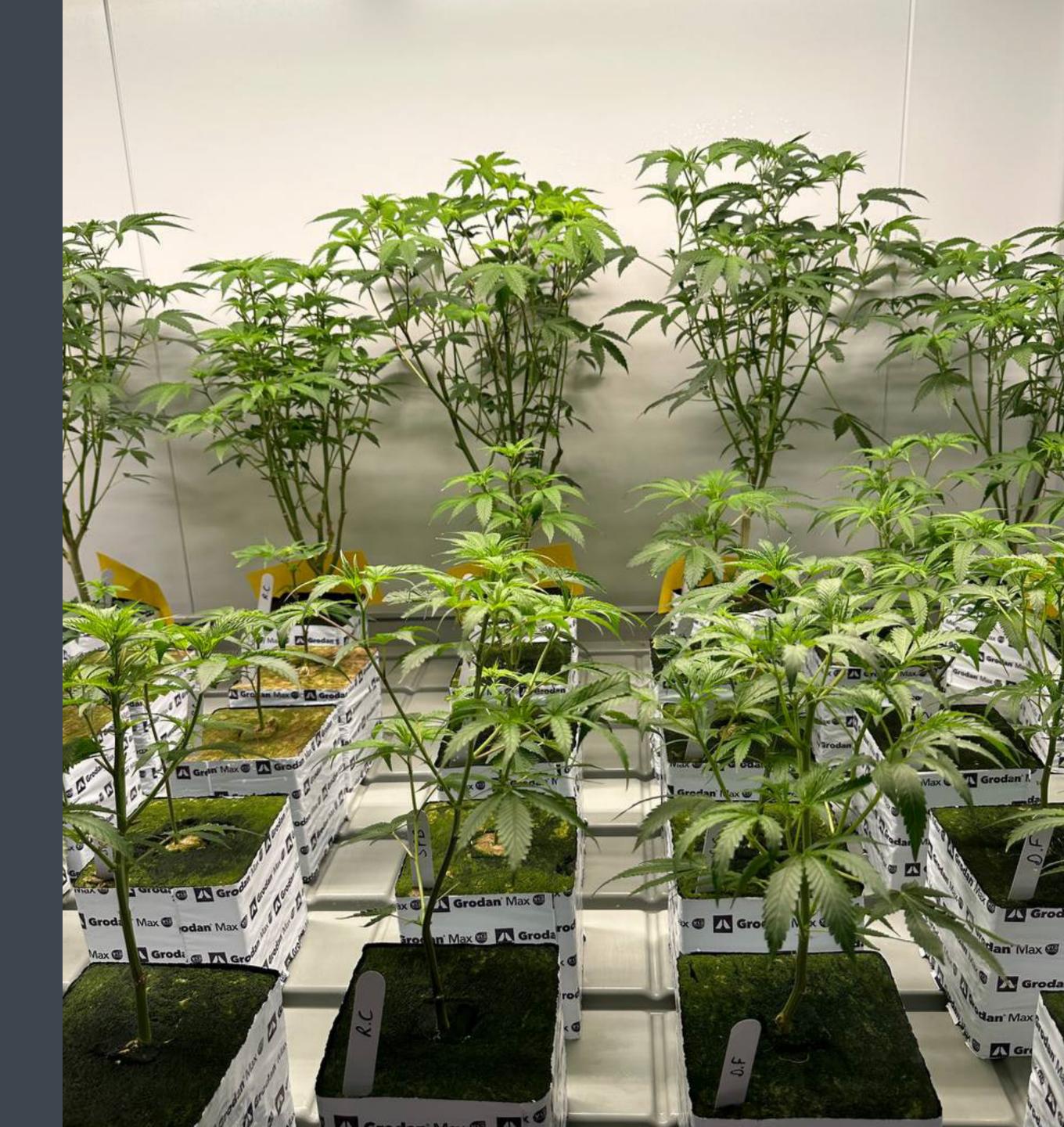
STRAIN BREEDING

At the moment we focused on breeding to develop and research our own brand of cannabis

Milestones:

- Establishing a clone bank with optimal phenotypes to ensure the stability and high quality of genetic material;
- Instituting a seed bank, founded on a clone collection, for systematic management of genetic diversity and ensuring reliable access to selected genetic resources;
- Crossbreeding clones with the aim of developing new genetic lines with increased levels of key metabolites, such as tetrahydrocannabinol (THC), cannabidiol (CBD), cannabigerol (CBG), and others, with a focus on enhancing their biological activity and stability

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ISO STANDARDS CONSULTING

Lawyers from Acacia developing methods of GMP EU and other standards of agricultural practice certification. In partnership of Rajamangala technical university from Bangkok

Our goal is to provide clear structured GMP, GCMS, GMCCP certification protocols for Thailand local cannabis market





ASTM: PRACTICE FOR GOOD MEDICINAL CANNABIS CULTIVATION (GMCCP)



RATIONALE:

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The inappropriateness of good manufacturing practice (GMP) and the inadequacy of good agricultural and collection practices (WHO-GACP) when applied to cultivation of *Cannabis sativa* L. and production of cannabis API starting materials creates a gap in the quality requirements of materials intended for medical and scientific use, in particular, for pulmonary administration. GACP does not require the level of process and environmental control or the requirement for batch-to-batch consistency of an API starting material intended for medical and scientific use.

Given the quality standards and batch-to-batch consistency required for inhaled medicines, Bedrocan International developed the Good Medicinal Cannabis Cultivation Practices (GMCCP) quality management system for indoor cultivation and production. GMCCP can achieve batchto-batch consistency in the quality of API starting materials.

The concept of GMCCP is supported, indirectly, through the USP working group's paper "Cannabis Inflorescence for Medical Purposes: USP Considerations for Quality Attributes" (Sarma et al, *Journal of Natural Products*, 2019) in which the quality attributes for cannabis inflorescence is defined to help mitigate public health risks associated with contaminated, substandard, or adulterated products.

19 Practice for

Good Medicinal Cannabis Cultivation (GMCCP)¹

This practice is issued under the fixed designation XXXXX; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

25261. Scope

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- 27 1.1 The Good Medicinal Cannabis Cultivation Practices (GMCCP) developed by Bedrocan
- 28 International BV provide an appropriate system for managing quality of indoor cultivation and
- 29 production processes and environmental controls to improve the batch-to-batch consistency and
- quality of active pharmaceutical ingredient (API) starting material intended for medical and

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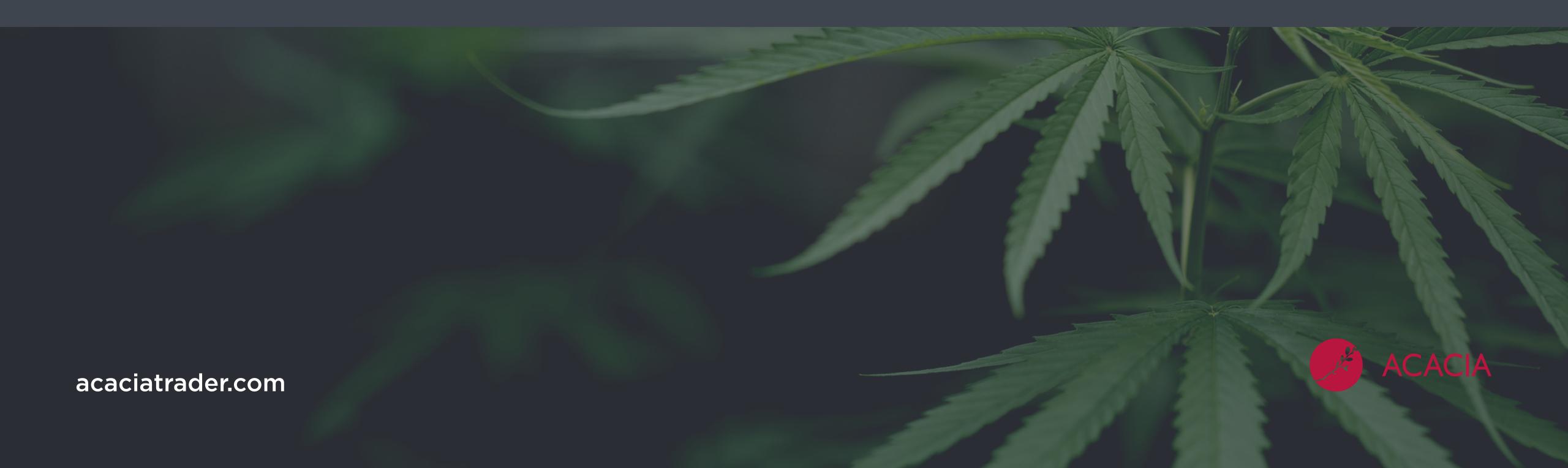
¹ This practice is under the jurisdiction of ASTM Committee D37 on Cannabis and is the direct responsibility of Subcommittee D37.01 Indoor and Outdoor Horticulture and Agriculture. Current edition approved XXX XX, XXXX. Published XXX XXXX.

TESTING PROGRAM

As a partner of Faculty of science Rajamangala technical university Acacia developing test programme for cannabis products

Liquid chromatography with UV detectors (for potency, terpene profile and pesticides) and inductively coupled plasma mass spectrometry (for heavy metals and harmful hormones)

Infrared spectroscopy tests with GemmaCert technology for the primary compounds of cannabis (THC, CBD and CBG) and water activity. More than 1000 tests in 2023



STANDARD METHODS

• US REDULATING ENTITIES

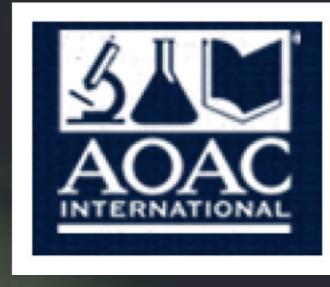








• INTERNATIONAL ORGANIZATIONS — STANDARDIZATION

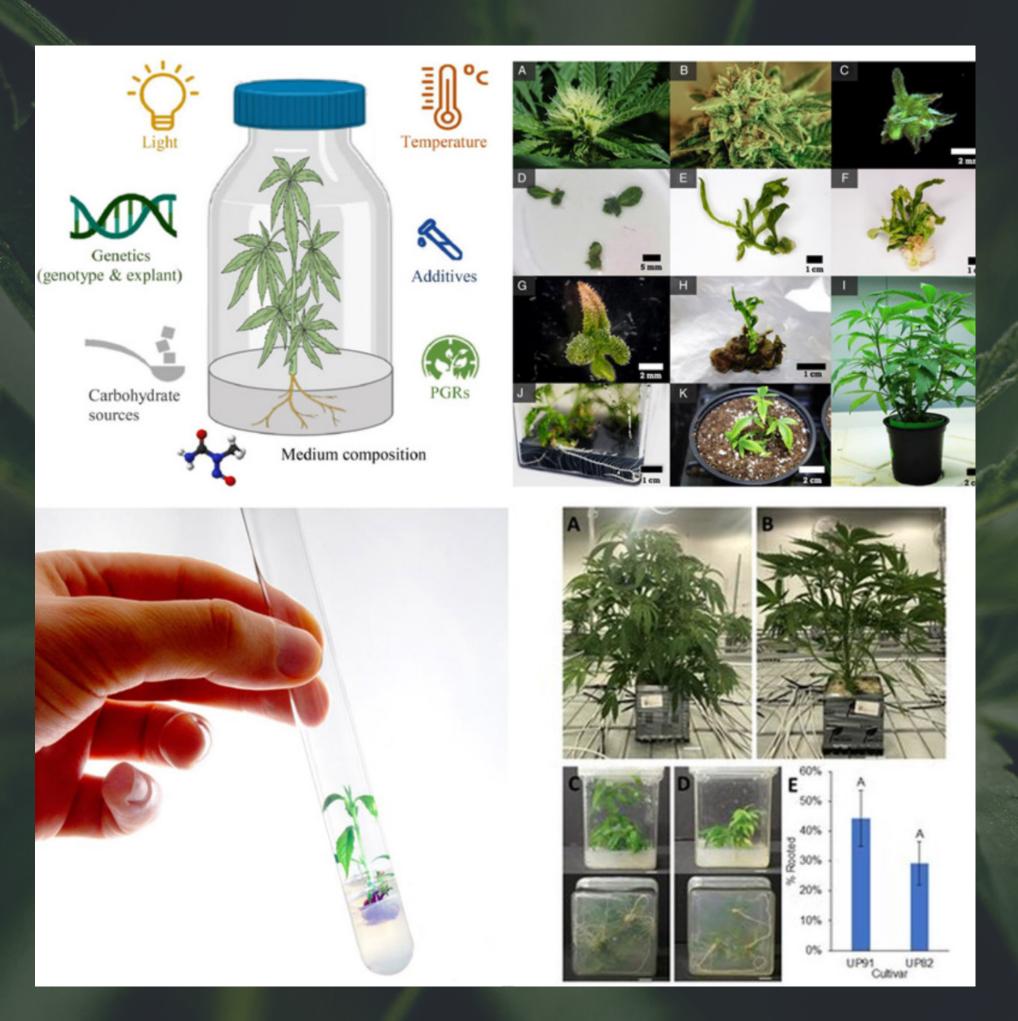






ACACIA PLANT GENETIC OPTIMIZATION PROGRAM:

- Development of novel strains with high levels of cannabigerol (CBG) tailored to meet the demands of the medical sector;
- Cultivation of cannabis through in vitro cell culture utilizing advanced genetic technologies;
- Epigenetic profiling modification of cannabis plants to enhance the concentration of essential metabolites, including tetrahydrocannabinol (THC), cannabidiol (CBD), cannabigerol (CBG), and other active compounds





ENGINEERING, TECHNICAL AND LEGAL EXPERTISE

- Turnkey engineering and construction of cannabis related facilities (farms, green houses, extraction and refinery laboratories);
- Supply of most common growing equipment, fertilizers and seeds;
- Legal expertise
 (licenses, construction permits, construction/growing certification)



