

CANNABINOIDS IN VET MEDICINE



Final degree project - Faculty of Veterinary Núria Antequera Juan - June 2024

Introduction

Evidence of medicinal cannabinoid use since 2000 B.C

Currently, scientific studies are rediscovering and validating their therapeutic effects

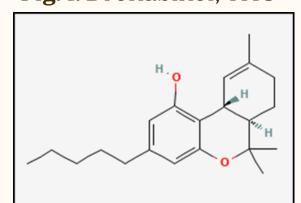
Methodology

Bibliographic research: Pubchem, PubMed, Google Scholar, UAB libraries

A total of 36 documents were consulted

Chemical structure

Fig. 1: Dronabinol, THC



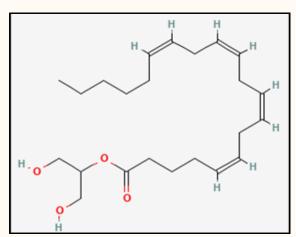
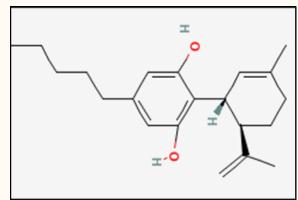


Fig. 3: Anandamida (AEA)

Fig. 2: Cannabidiol (CBD)



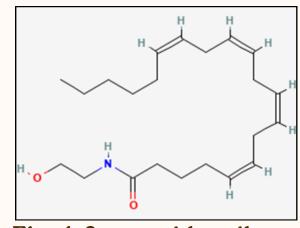


Fig. 4: 2-araquidonoil glicerol (2-AG)

Main phisiological functions

AEA&2-AG

Neuriprotective

Increase REM phase

Energetic

methabolism

Appetite stimulator

Analgesic

Antineoplastic

CBD

Analgesic

Antioxidant

Antiemetic

Anticonvulsant

Antiinflamatory

Anxyolite

Vet

Antineoplastic

Use of cannabinoids

Human

- Multiple sclerosis
- Chronic

neuropathic pain

- HIV
- Cancer
- Tourette syndrome

- Osteoartritis and chronic pain
- Seizures
- Pruritus
- Cancer
- Behavioral disorders



Objectives

Current use of cannabinoids in vet medicine

- Chemical structure
- Endocannabinoid system
- Mechanism of action
- Physiological functions
- Use of cannabinoids in human medicine

Mechanism of action

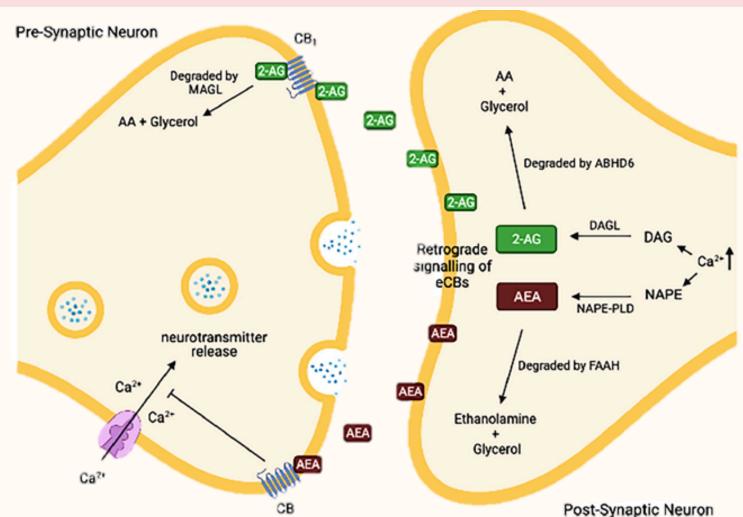


Fig. 5: Representation of the mechanism of action of endocannabinoids (2-AG and AEA) at the neuronal synapses

Table 1. Summary of a Cross-sectional survey on the use of medicinal plants by veterinarians in Spain

Survey results	Most common conditions	Animals treated	Treatment characteristics	Comments
313 valid responses 70,5% CBD	Anxiety Cognitive dysfunction Chronic pain Inflammation Cancer	Dogs Cats Others	Oil and tablets Monoherbal Mainlyf for musculoskeletic conditions	Positive attitude towards phytotherapy Need for more studies to improve therapeutic efficacy evidence

Discussion and conclusions

- Use and interest increasing
- Limited studies and information about real benefits
- Need of further investigation
- With more data, cannabinoids could become a tool for medicine and improve quality of animals

