

# The use of chemical additives by a sample of small scale cannabis growers in three countries

SIMON LENTON<sup>1</sup>, VIBEKE A. FRANK<sup>2</sup>, MONICA J. BARRATT<sup>3, 1, 4</sup>, GARY R. POTTER<sup>5</sup>, Tom Decorte<sup>6</sup>.

1. National Drug Research Institute, Curtin University, Australia
2. Centre for Alcohol and Drug Research, Aarhus University, Denmark
3. Drug Policy Modelling Program, National Drug and Alcohol Research Centre, UNSW Australia, Australia
4. Behaviours and Health Risks Program, Burnet Institute, Australia
5. Lancaster University Law School, UK
6. Institute for Social Drug Research, University of Gent, Belgium

Presenter's email: s.lenton@curtin.edu.au

**Introduction:** There is an unfolding recognition of the adverse impacts the use of potentially harmful chemical pesticides and nutrients by cannabis growers. Of major concern has been Plant Growth Regulators (PGRs), many which have been banned from food crops for decades. These have been found unlisted in a number of cannabis growing supplements targeted at cannabis growers. In this study we describe the cannabis growing practices used by small scale recreational cannabis growers and specifically predictors of use of chemicals.

**Method:** Data analysed in this paper were gathered from a web survey of 1,722 current and recent cannabis growers in Australia, Denmark and the UK, who were asked about their cannabis growing practices, including their use of fertilizers and nutrients.

**Key Findings:** Overall 44% of the sample reported using any chemical fertilisers, nutrients or insecticides. Univariate analyses indicated chemical use was significantly higher among: respondents from the UK and Australia compared to Denmark; those who grew to sell, male growers, those who grew using hydroponic methods and artificial light with soil, and those who had a grow area up to 3 square metres. However logistic regression indicated that after controlling for the effect of other variables, the only unique predictor of the use of chemicals was grow method, notably hydroponics.

**Discussions and Conclusions:** Problems associated with product labelling make it difficult to determine which products contained PGRs or other harmful chemicals. There is a need for further research to analyse constituents of chemical products marketed to cannabis growers.

**Disclosure of Interest Statement:** An earlier version of this paper was presented at the International Society for the Study of Drug Policy Conference in Aarhus in Denmark in May 2017.