»NIK E« field test for cannabis and microscopic examination of plant material - some validation experiments

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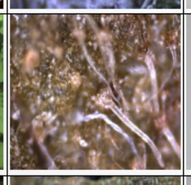
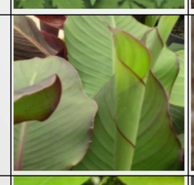
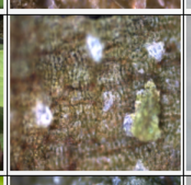
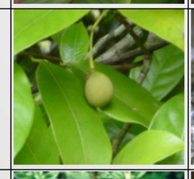
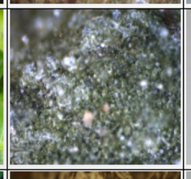
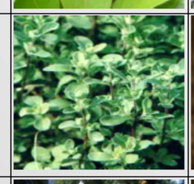
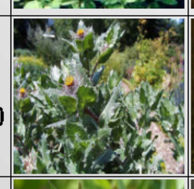
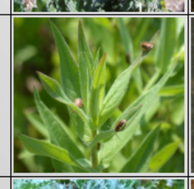
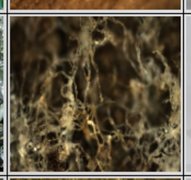
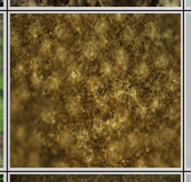
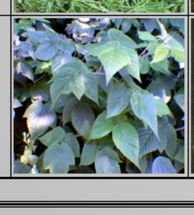
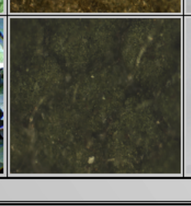
Introduction

The starting points of this small study were two articles: “The evidential value of the Duquesne's Test for Cannabis - a Survey”[1] and “False positives equal false justice",[2] with a critical viewpoint on the use of field drug tests, especially NIK E. Authors of the first article state that between 270 different non cannabis plant samples, none reacted positively, while authors of the second article numbered several plants which reacts positively with field NIK E test. In our work we investigated macroscopic and microscopic characteristic and the reaction obtained by NIK E test for about 40 different plant material types that are available in Slovenian market places and can be grown in the gardens as well. Some critical plants from reference 2 were included in study.

Plant	Macroscopic appearance of the plant	Microscopic appearance of the plant (Olympus BX51 microscope with 100x zoom)	Color appearance NIK E test for plant	Result (reaction to cannabis and cannabinoid compounds)
CANNABIS (KONOPLJA)				pozitive
* LAVENDER (SIVKA)				negative
* AGRIMONY (REPIK)				negative
* CANNA (KANA)				negative
* NUTMEG (MUŠKATOVEC)				negative
MARJORAM (MAJARON)				negative
HOLY THISTLE (KORDABENEDIKTA)				negative
PURPLE LOOSESTRIFE (KRVENKA)				negative
WORMWOOD (PELEIN)				negative
ARTICHOKE (ARTIČOKA)				negative
PEPPERMINT (POPROVA META)				negative
TARRAGON (PEHTRAN)				negative
RASPBERRY (MALINA)				negative

Plant	Macroscopic appearance of the plant	Microscopic appearance of the plant (Olympus BX51 microscope with 100x zoom)	Color appearance NIK E test for plant	Result (reaction to cannabis and cannabinoid compounds)
CAMOMILE (KAMILICA)				negative
HOP (HMELJ)				negative
TEA PLANT (ČAJEVEC)				negative
CATNIP (MAČJA META)				negative
CHIVE (DROBNJAK)				negative
WILD LETTUCE (DIVJA SOLATA)				negative
CANTELLA ASIATICA (AZIJSKI VODNI POPNJAK)				negative
LAUREL (LOVOR)				negative
OREGANO (ORIGANO)				negative
NETTLE (KOPRIVA)				negative
PARSLEY (PETERŠILJ)				negative
KIDNEY VETCH (RANJAK)				negative
GALANGAL (GALGANT)				negative

Plant	Macroscopic appearance of the plant	Microscopic appearance of the plant (Olympus BX51 microscope with 100x zoom)	Color appearance NIK E test for plant	Result (reaction to cannabis and cannabinoid compounds)
SAGE (ŽAJBELJ)				negative
DAMIANA (DAMIANA)				negative
YARROW (RMAN)				negative
SUMMER SAVORY (ŠETRAJ)				negative
THYME (TIMIJAN)				negative
TOBACCO (TOBAK)				negative
PLANTAIN (TRPOTEC)				negative
CELERY (ZELENA)				negative
CALAMUS (KOLMEŽ)				negative
BASIL (BAZILIKA)				negative
DILL (KOPER)				negative
MAYPOP (PASIJONKA)				negative
ROSEMARY (ROŽMARIN)				negative

Conclusion

Macroscopic and microscopic characteristics and result of reaction cannabis and cannabinoid compounds of the selected plants are shown in the tables. Our findings did not confirm the findings from reference 2.

* Plants are identified on reference 2.

[1] K. Bailey, M. A. D. Phil, The evidential value of the Duquesne's Test for Cannabis - a Survey, J. of Forensic Sciences, 24 (4), 1979, str. 817 – 841

[2] http://209.85.129.132/search?q=cache:_YCHe9wNiDwJ:www.mpp.org/assets/pdfs/library/Report-Final.pdf+False+positive+false+justice&cd=3&hl=sl&ct=clnk&gl=si

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