

LITTLE CIGARS - BIG CONCERNS

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INTRODUCTION

- In recent years, little cigars have become a popular choice among young Canadian smokers.
- Little cigars are considered to be "cigars" since they are "tobacco-wrapped"; however, they are looking more and more cigarette-like.
- Little cigars are often fruit, candy or alcohol-flavoured and are sold in single units.

OBJECTIVES

- To characterize little cigars and their smoke emissions.
- To compare little cigar emissions with those of Canadian cigarettes.
- To compare little cigars with and without filters

METHODOLOGY

- Physical characteristics and content of 34 little cigars (14 without filters, 20 with filters) were measured using Canadian TRR mandated analytical methods.
- Emissions of 4 little cigars were measured using Canadian TRR mandated analytical methods under two smoking conditions.
- Emissions were normalized for nicotine using

$$\frac{\text{Emission Analyte}}{\text{Emission Nicotine}} = \text{Nicotine Normalized Emission}$$
- Ratios of emission normalized for nicotine **Little Cigar / Canadian Monitor 8** were used for comparison with cigarettes.

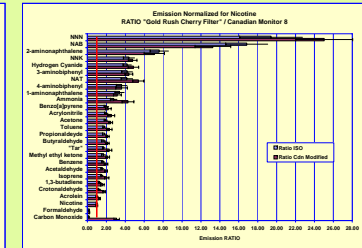
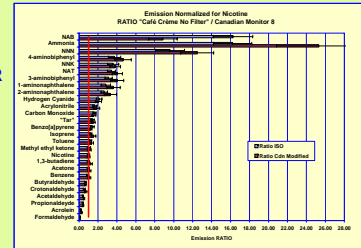
Ratio of Emission Normalized for Nicotine Little Cigar / Canadian Monitor 8

CANADIAN MONITOR 8 Reference

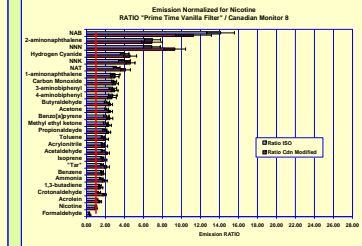
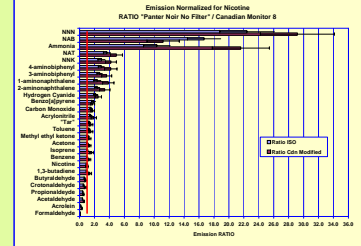
Tar ISO: 12.0 mg/cig
Nicotine ISO: 1.0 mg/cig
Smoke pH: 5.9



Café Crème NO FILTER
Tar ISO: 37.0 mg/cig
Nicotine ISO: 2.2 mg/cig
Smoke pH: 7.6



Panter Noir NO FILTER
Tar ISO: 36.3 mg/cig
Nicotine ISO: 2.7 mg/cig
Smoke pH: 7.1



EMISSION of LITTLE CIGARS WITHOUT FILTER: Ratio WITH NORMALIZED NICOTINE YIELDS:

- Both little cigars **without filter** show the same ratio patterns when compared to the Canadian Monitor 8.
- Solid phase compounds are found at higher yields.
- Much higher nitrosamine, ammonia yields and smoke pH suggest different origin and tobacco type:
 - different curing process
 - higher nitrate tobacco content, i.e. fertilizer
- N-based compounds are found at yields from twice to 30 times higher.

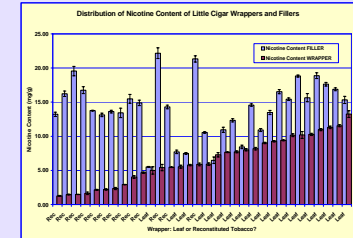
EMISSION of FILTERED LITTLE CIGARS:

Nicotine yield and smoke pH are comparable to the "Reference cigarette".

Ratio WITH NORMALIZED NICOTINE YIELDS:

- Both **filtered** little cigars present the same ratio patterns when compared to the Canadian Monitor 8.
- Much higher nitrosamine, hydrogen cyanide and N-based compound yields suggest different origin and tobacco type:
 - different curing process
 - higher nitrate tobacco content, i.e. fertilizer
- Results show higher yields than the cigarette but less dramatic than filter-less little cigars.

FI LLER and WRAPPER



- Reconstituted tobacco wrappers display lower nicotine content than natural leaf wrappers.
- Wrapper Nicotine content varies from 6-24 mg/g.

Visual Observations

- 13 / 14 Little Cigars **"WITHOUT Filter"** have both wrapper and binder, like traditional cigars.
- 14 / 14 Little Cigars **"WITHOUT Filter"** have a wrapper made of tobacco leaves, like traditional cigars.
- 9 / 20 Little Cigars **"WITH Filter"** have both wrapper and binder, like traditional cigars.
- 13 / 20 Little Cigars **"WITH Filter"** have a wrapper made of reconstituted tobacco.

CONCLUSION

- Little cigars deliver higher levels of toxicants than cigarettes,
- Non-filtered products have higher yields than filtered products,
- Physical characteristics of non-filtered little cigars are more similar to traditional cigars,
- Filtered little cigars are different than non-filtered little cigars and are more cigarette-like.

REFERENCES

[1] Health Canada, Tobacco Reporting Regulations (TRR), SOR-2000/273, P.C. 2000-1040, Ottawa, June 2000.