

INVESTIGATION INTO THE TYPES OF PIPE TOBACCO

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ABSTRACT

The European commission community highlights the importance of development for the standards of tobacco products control including the cigarettes. Pipe tobacco has not been under any control and surveillance yet. Thus, there is a lack of information, methods and apparatus for observing the emissions of harmful substances in smoke. There is also a lack of established conditions, rules and any control.

The purpose of this research is to discover the importance and essence of modern types of pipe tobacco, the level of preference and possibilities for their control.

The first preliminary studies of pipe tobacco provide direction for further research as there is a high possibility for increasing their consumption.

Key words: tobacco, tobacco products, control.

ИСПИТУВАЊЕ НА НЕКОИ МАРКИ НА ТУТУН ЗА ЛУЛЕ

Во извештаите на Комисијата на Европската заедница се истакнува важноста за развивање на стандарди за контрола на тутунските производи, вклучувајќи ги и цигарите.

Тутунот за луле досега не бил подложен на никаков надзор и контрола. Поради овие причини, не постојат какви било информации, методи и апаратура за следење на емисиите на штетните елементи од чаdot. Исто така, не постојат утврдени услови и недостасува регулатива и контрола.

Целта на ова истражување е да се открие важноста и суштината на модерните типови на тутун за луле, нивото на одредени параметри и проучување на можностите за нивна контрола.

Овие први, прелиминарни студии на тутунот за луле даваат насоки за подлабоко истражување, затоа што постои голема веројатност за зголемување на нивната консумација.

Клучни зборови: тутун, тутунски производи, контрола

INTRODUCTION

As a member of the European Community, Bulgaria has to fulfill a number of tasks assigned by the European Parliament, Commission and Council regarding the forthcoming changes in Directive 2001/37/EO. In the reports of the Commission of the European Community as well as before the European Parliament, World, European Economic and Social Committee have been again emphasized the importance of targeted research on developing standards for tobacco products control including cigarettes (1,2,3).

Pipe tobacco has not been under any control and surveillance so far. Moreover, until recently, it was thought that the form of tobacco product was outdated not meeting the dynamism

of our times. Thus, there is a lack of information, methods and apparatus for observing the emissions of harmful substances in smoke. There is also a lack of established conditions, rules and any control.

In recent years, the tobacco for hand rolling cigarettes or rather RYO tobacco has been an alternative to the industrial production. At the same time, the outspread types of cut pipe tobacco have recorded growth in consumption. *According to this fact and its characteristic of full flavored taste lead to us to think that the type of pipe tobacco may be more preferred than hand rolling cigarettes.*

Purpose

The aim of this research is to discover the essence and importance of modern brands of

tobacco for pipes, the degree of preference and the opportunities for their control.

MATERIAL AND METHODS

The focus of our studies was on the preferred brand of tobacco pipe on the Bulgarian market. In order to achieve the goal of the task, database was created by conducting monitoring for the preferred consuming brands in 2009. The subject of our further research was the subsequent

data processing and the specification of brands.

An expert and tasting assessment was made on the contingent of tobacco pipe. This was followed by full physical-chemical analysis of samples, processing of results and interpretation based on standardized methods.

RESULTS AND DISCUSSION

The results of the conducted monitoring on the orientation of tobacco products consumers are visualized in figure 1.

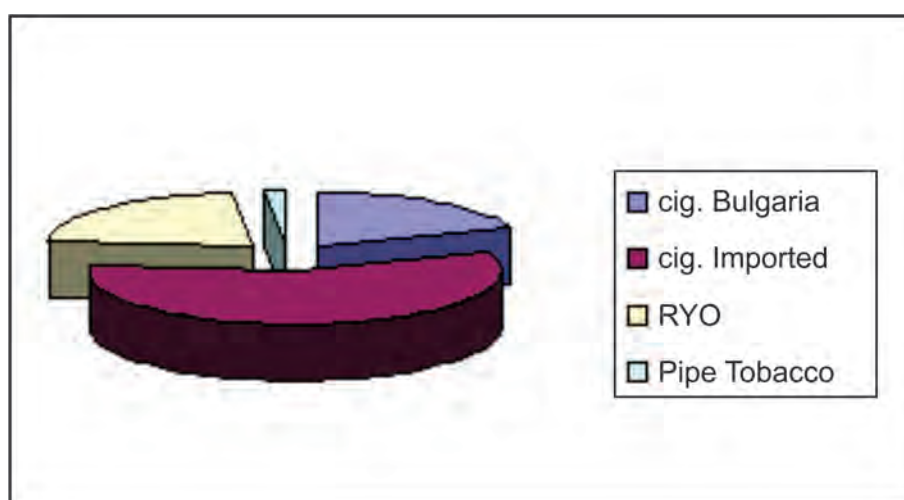


Fig.1 Consumer preferences of tobacco products

When comparing the data with 2008, there is an increasing demand for pipe tobacco illustrated in Table 1 and Figure 2.

Table 1 Percentage of preferred tobacco products in 2008 and 2009

Tobacco products	2008	2009
Cigarettes – Bulgarian Industry	19,97	19,21
Imported cigarettes	57,81	57,49
RYO	21,60	21,67
Pipe tobacco	0,62	1,63

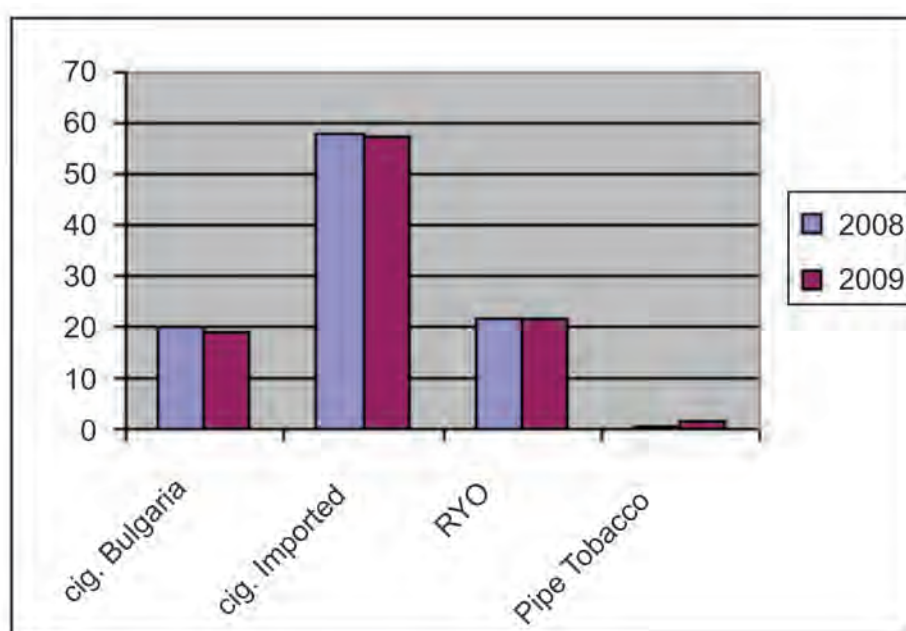


Fig.2 Percentage of preferred tobacco production in 2008 and 2009

The increasing of pipe tobacco consumption is very important for the reduction in expense of Bulgarian cigarettes – 0.76% whereas imported cigarettes are half reduced compared to the Bulgarian – 0, 32%. It is a noteworthy fact that the share of tobacco for rolling cigarettes and the share of consumed pipe tobacco rise at approximately same percentage. The growing interest in pipe tobacco can be primarily attributed to the full and filling flavor. It is economically more favorable than the hand rolling tobacco of cigarettes and it is almost equal to, with a slight more economic benefit in some brands of industrially manufactured cigarettes.

The consumers of pipe tobacco can be divided into two groups. The first are those according to the above-mentioned reason. The latter are those fond of pipes as an alternative to the hectic pace of life. The lighting of a pipe is a ritual signifying time for rest and reflection. There are also some who want to display stability by doing it. There have lately been found even associations in the logo of the pipe.

The overall conclusion of the monitoring is that the increasing consumption of pipe

tobacco is not due to the ever growing alternative of hand rolling cigarettes.

It should be emphasized that the results of the conducted monitoring cannot be taken as statistically significant. The essence of these results lies in establishing a perceived tendency in change of tobacco products consumption in recent years. Even as a proof, it can be taken the Bulgarian market which is no different than the world market in terms of dynamics and directions.

While conducting the monitoring, many brands of pipe tobacco were also taken into consideration. This fact shows that there is no categorical view, or rather existing tradition as the selection is based on poll questions.

The general conclusion of the examination of the required brands for pipe tobacco is that the brands produced in Germany, Denmark and the Netherlands will be at an advantage compared to other brands. The results of the use of preferred brands of pipe tobacco are graphically shown in Figure 3.

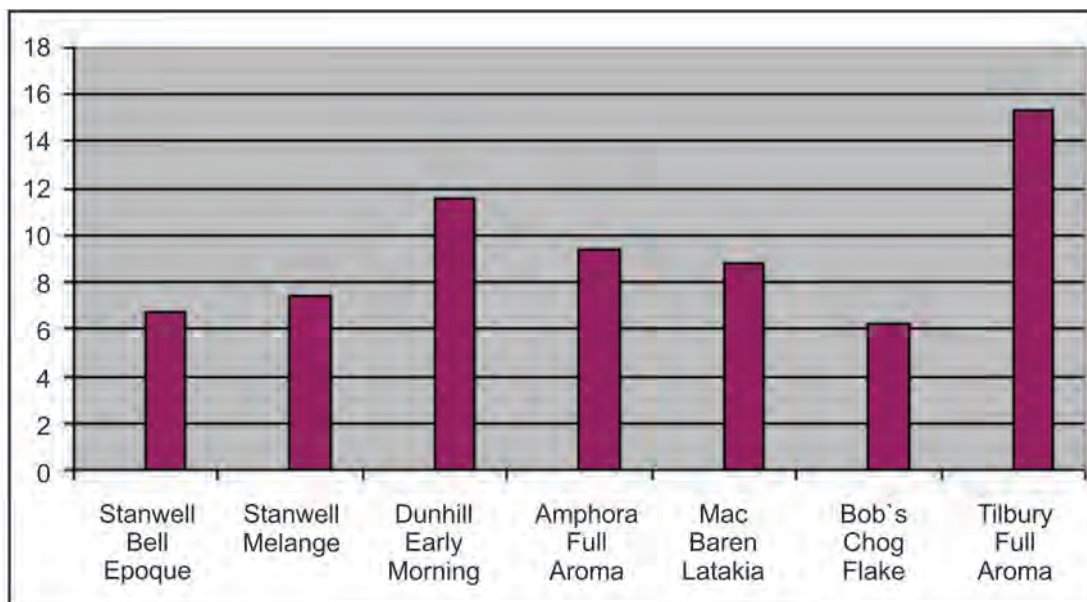


Fig.3 Preferred pipe tobacco brands

While processing the results, 38 brands of pipe tobacco were observed in 2009, but graphically are shown only those whose consumption is greater than 6%. From the image, it can be noted that the most dominant brand is Tiliburu Full Aroma of Poshl Tabak, Germany at 15, 33% which determined the object of further research. The results of the made expert assessment of Tiliburu Full Aroma are as follows;

The Packaging consists of 40 grams of excise band and a recommendation for pipe tobacco priced at 8, 00 lev. On the front side, there are warning and special labels, producer and importer, brand name, prepared for realization, bar code. Unlike the tobacco for hand rolling cigarettes, packed units meet all required standards.

The tobacco has quite low values, with width of 1,77 mm incision and vary from 1,36 mm to 2,18 mm, with moisture content of 16,61 %. The tobacco contains a small percentage of processed tobacco ribs at 7, 42%.

When opening the packing, the aroma is intense at a higher average level, fresh, quite dark, with a character of cherry and rum-like – richly hued. While smoking, the cherry-like hue is dominant, and the taste is full at a medium level. A general conclusion can be drawn that it is tobacco with a balanced tasty and aromatic complex.

The results of the chemical composition of tobacco with its basic parameters are as follows:

Nicotine	2, 31%
Reducing sugars	10,10 %
Total nitrogen	2, 51%
Content of ashes	14, 76%

The results of the basic chemical parameters in the studied tobacco are close to the values found in tobacco for hand rolling cigarettes.

In order to explore the possibilities for pipe tobacco control, the further research was based on laboratory-made cigarettes compared with pipe smoking. The smoking cigarettes were made without filter and with a precise weight. The first variant of cigarettes were made of poorly combustible and impermeable paper with a mass of 0,500 g. The second variant of cigarettes was made of industrial paper for cigarettes with air permeability of 50 CU and flammability of 55 s. The third variant of cigarettes was made of

cigarettes' spill Orient Ehpres i.e. an imitative cigarillo. The last two variants were with a mass of 1, 00 g. Because of a lack of a method, we emphasized on creating burned tobacco in various conditions. According to this, in the first variant, we created conditions which are close to those of pipe smoking. In the second variant, the conditions are close to those of controlled products (cigarettes) and the conditions in the third variant are close to the conditions of cigarillos and cigars based on ISO standard.

The purpose of this variant was to give us insight into any future research and discovering possibilities for controlling the consumed smoke while pipe smoking. The pipe itself helped us for the control. Of the three studied elements in smoke such as tar, nicotine and CO, we stressed mainly the content of tar in smoke. The top of one standard pipe can be filled with tobacco of 4 grams. In order to make a comparison during the research, the pipe was filled with tobacco of 1 gram in eleven iterations. The average arithmetic value of tar content was 0, 03600 grams.

In the first variant, the estimated amount of tar per unit of burned tobacco was 0, 03658 grams. In the second variant, the estimated amount was 0, 01654 grams and in the third variant 0, 04352 grams. During the control of the first variant, it was recorded a slight increase in the amount of tar. On the one hand, this is mainly because of the impact of the paper which takes part in the combustion and it is incombustible and impermeable. On the other hand, the smoke goes throughout the stem of pipe and it is very likely that an amount of it remains on its walls.

In the second variant, the amount of tar was significantly with smaller value. In this case, it was used a paper with medium permeability which had a considerable influence upon the content of tar. In the third variant, the amount of tar significantly exceeded the control. This is due to the specificity of the cigarette paper which was impregnated with tobacco extract.

The results of the third variant are of significant importance for this research as they showed a tendency for further analysis and give us an opportunity to invent new methods for pipe tobacco along with the existing ones for cigars and cigarillos.

CONCLUSIONS

This initial study on pipe tobacco gives us directions for further research. From the obtained results, it is reasonably safe to assume that the pipe tobacco cannot substitute the tobacco for

hand rolling cigarettes. Its control is compulsory and possible as well. This research serves as a direction for carrying out future ones.

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