

Project No.: T-1240

Project Title: Matinee Regular

Objective: To reduce the Canadian tar delivery and to maintain or increase the nicotine yields of regular Matinee while retaining its acceptable subjective smoking properties.

Introduction: The approach to this problem has been two-fold. One has been to survey the effects of a variety of higher porosity papers on tar and nicotine yields using Matinee blend as a vehicle; the other to use modified recipes with the regular 510 paper to determine if blending has been successful in reducing tar yields whilst increasing nicotine levels. Currently, it is not required to lower tar below 10 mg but in the eventuality that this may be required a 'marriage' of the two factors might be suitable.

(i) Project Title: Matinee Regular - Recipe Modifications

Personnel Involved: M.T. Schiff and R.R. Smith.

1st Quarter 1971 Three samples were tested. These samples included a regular Matinee blend; a modified Matinee blend using flue-cured tobacco; and a modified Matinee blend incorporating 5.5% air-cured tobacco.

Analytical results indicated that the recipe modifications did not effect any significant changes in either TPM or nicotine levels. Although the air cured sample reduced tar by the greatest amount (9%) the nicotine yield fell below that of the control.

From a subjective standpoint the results appeared to indicate that both of the modified blends tested were subjectively similar to regular Matinee with respect to the smoking properties investigated (i.e. irritation) to the mouth, lips, tongue, throat, and nose, quantity of taste, quality of taste and preference), and were subjectively acceptable. There were indications that the modified blend using 5.5% air-cured tobacco may provide somewhat more acceptable properties than the modified blend utilizing flue-cured tobacco only. Though both modified blends were subjectively acceptable, they failed to meet other criteria of the project.

(ii) Project Title: Matinee Regular Cigarettes with Ecusta High Porosity Paper.

Object: To examine the effects of Ecusta High Porosity paper, at three different porosities, on the smoking characteristics of Matinee tobacco.

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Project T-1240 (cont'd)

Personnel Involved: R.R. Smith

1st Quarter 1971:

Three experimental samples were manufactured from regular Matinee tobacco employing papers of 8, 10, and 12.9 greiner sec porosities. For the samples submitted, no substantial differences in smoke yields were observed although the 8 greiner sec paper did reduce the tar levels from those of the control by 1 mg. In terms of yields/puff both nicotine and TPM were reduced.

(iii) Project Title:

Matinee Regular Cigarettes with Bollore Verge, Schweitzer 9 greiner sec high porosity and Ecusta TOD-04572 cigarette papers.

Personnel Involved: R.R. Smith

2nd Half 1971:

The experimental data from these analyses indicated that (1) Bollore Verge 511 paper increased both TPM and nicotine by 10% over the regular Matinee 510 Schweitzer paper (2) That Ecusta TOD-04572 effected no change in smoke yields (3) Schweitzer 9 sec paper reduced yields for TPM and nicotine by 8%.

(iv) Project Title:

Matinee Regular - Recipe Modifications

Personnel Involved:

M.T. Schiff and R.R. Smith

2nd Half 1971:

A total of six samples were tested for smoke levels. Three recipes and two types of cigarette paper were involved. Three samples, all made with regular 510 paper, included a regular Matinee blend, a modified Matinee blend in which two hogsheads of Grade H (Maritimes) 1970 crop were replaced with two hogsheads of WK-6 1968, and a modified Matinee blend in which two hogsheads of Grade AF (Quebec) 1969 were replaced with two hogsheads of PL-1 1969. Three further samples were made as above but using a high porosity Ecusta cigarette paper.

Both modified blends appeared to increase the TPM and nicotine levels by 10% for both cigarette papers. For this reason only the three samples with regular 510 paper were tested subjectively and the results indicated that both samples were as subjectively acceptable as regular Matinee. This experiment was not wholly successful in that it increased TPM and nicotine levels proportionately and failed to meet the objective's criteria.

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