The effect of some additives on the formation of cigarette smoke

Do-Young Ra, Byong-Kwon Jeh, Chang-Gook Lee, Dong-Wook Lee and Si-Hyung Jo

KT&G Central Research Institute

The influence of tobacco additives on the composition of the combustion products in mainstream smoke is discussed. The effect of additives on the chemical composition of smoke was further evaluated in oder to discover additives that would alter the chemical composition of smoke. Tobacco leaves were uniformly treated at a 1–5% level with 8 groups of additives. Group M treated with alkali metal salt and group S, F, O give lower tar, nicotine and CO values than the control. Group AN treated with natural antioxidant gives higher tar and CO values than the control. The increases are most probably due to the high transfer rate of the ingredients to smoke. M3 and P1 reduced above the 50% of TSNA from the smoke. M4 and P1 reduced above the 70% of HCN from the smoke.