Effect of Air Flow on Chemical properties of Cured Leaves in Bulk Curing Process

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ABSTRACT: The bulk curing experiment to improve the quality of flue cured leaves were carried out to evaluate on the volume of air circulation in bulk barn and the relationship with chemical properties of cured leaves. It's studied the effect of the reducing air flow from the color fixing stage to the stem drying stage of flue curing process on chemical properties of cured leaved were observed. As to the chemical properties, there was no difference in chemical components between reducing air flow and conventional ones. It showed that the leaves cured by this method was decreased in citric acid of the nonvolatile organic acids and others constituents was on a level with conventional ones, but it was higher in all higher fatty acids content of leaves cured by this method compared with in that of conventional ones. A major chemical compounds including the solanone in relation to aromatic essence was higher in this method than those of conventional ones, and it was estimated that there was decreased in CO, nicotine and Tar content of cigarette smoke conparing to the conventional curing method.