

Toxicant Composition in Countrymade Liquor (Indian) †

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Abstract: Last year, 98 people died in the northern state of Punjab after drinking illicit liquor. And in 2019, some 150 people died in northeastern Assam state similarly, many more registered and unregistered death cases all over the country. On 29 May 2021, the most recent incident of Another Toxic Liquor Tragedy in Aligarh UP where 22 people have died after consuming toxic countrymade liquor. This research analyses contents and adulterants used in illicit liquor by various physical, chemical, and instrumental examinations. Generally, alcohols have been considered as a derivative of water in which one hydrogen atom of water has been replaced with alkyl Chain (generally represented as R) e.g., methyl alcohol, ethyl alcohol, etc. Ethyl alcohol is a member of this broad class of compounds that have been broadly used as liquor. Liquors are the hallucinogenic ingredient in alcoholic beverages like beer, wine, champagne, and distilled spirits. Liquors can be broadly classified into two categories: recorded and unrecorded liquor. The production, sale, and consumption of recorded liquor is monitored and recorded, whereas the opposite is true for unrecorded liquor. Liquor is divided into three subcategories—licit, illicit, and surrogate. Licit liquor, also known as countrymade liquor, is legally manufactured in licensed breweries. Illicit liquor is manufactured either in the home or in small, unlicensed breweries and is cheap, manufactured with the intent to evade taxes. Surrogate alcohol has high ethanol content but is not manufactured for human consumption. In the current investigation, 200 samples from 6 different districts of Moradabad and Bareilly zone were collected, and analyses were made in Forensic Science laboratory Moradabad. The investigation involved the qualitative and quantitative analysis of all samples and the examination of the adulterants if present. The main characteristics taken under investigation were the concentration or density of ethyl alcohol, amount of adulterants like urea, NH₄Cl, chloral hydrate, acetone, and methyl alcohol added in illicit liquor.

Keywords: liquor; licit; illicit; surrogate.

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Conflicts of Interest

The authors declare no conflict of interest.