

Kopi Luwak Artifisial *Artificial Luwak Coffee*

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Kopi luwak mempunyai rasa yang khas sehingga mempunyai harga jual yang tinggi, namun kopi luwak asli tidak terjamin keamanannya untuk dikonsumsi karena berpotensi tercemar *E. coli* dan *Salmonella*.

Kopi luwak artifisial dihasilkan dengan teknologi bioreaktor dan isolat bakteri lambung luwak. Bioreaktor merupakan peralatan yang menyediakan lingkungan biologis untuk menunjang terjadinya reaksi biokimia yang melibatkan organisme atau komponen biokimia aktif yang berasal dari organisme. Kopi luwak artifisial memiliki senyawa volatile yang identik atau memiliki kesamaan dengan kopi luwak asli dan masuk ke dalam golongan *specialty* kopi.

Proses fermentasi biji kopi di dalam bioreaktor dapat dikontrol sesuai dengan kondisi luwak, baik pH, suhu, lama fermentasi maupun enzim dan gerakan peristaltic pencernaan luwak.

Luwak coffee or mongoose coffee, refers to the beans of coffee berries once they have been eaten and excreted by the mongoose (Paradoxurus hermaphroditus). This coffee has a distinctive flavor that has a high price, but the original mongoose coffee might also be contaminated by E. coli and Salmonella which affect its safety for consumption.

Luwak coffee can be produced artificially with bioreactor technology and mongoose gastric bacterial isolates. Bioreactor is a device that provides a biological environment to support the occurrence of biochemical reactions involving organisms or biochemically active components derived from the organism. Artificial Luwak coffee has volatile compounds that have similar or identical characteristics to the original Luwak coffee and belong to the class of specialty coffee.

Fermentation process of the coffee beans in the bioreactor can be controlled in accordance with the conditions within the civet, e.g. pH, temperature, length of fermentation and enzyme and peristaltic movements of the mongoose digestion.

