



*Format:* 20\* 1 Pint .9 fl.oz. (500ml) bottles *EAN-code*: 4 001184 800109



Apostelbräu's historic Roggenbier {Rye beer} "A most unusual journey to create a most unusual brew"

The objective?

To create a beer that truly captures the complex flavors and aromas of rye ("roggen"), a scrappy and highly nutritious grain

## **Ingredients used:**

Malts: 55% Rye Malt (including roasted rye malt), Caramalt, Vienna Malt Hops: Bavarian Mandarin {a new German varietal}, continuously-hopped during the 90 minute boil, Tettnanger: for dry-hopping Yeast: English ale yeast for primary fermentation. Bottom-fermenting yeast for secondary fermentation

## **Brewing process:**

The lautering took place over 24 hours and was immensely labor-intensive! The brewmaster's lautering equipment barely survived it!

<u>Primary Fermentation</u>: On the second day, the brewmaster, Rudi Hirz, added his homemade flat rye bread to the fermenter. His rye bread is made from 100% rye malt and liquid ale yeast; he allows it to ferment for one day before baking in his pizza oven at 356°F.

The idea of using 100% rye bread was originally conceived by Rudi's professor at the University of Weihenstephan, Dr.Narzis, who had wanted to test this idea for many years but never got around to doing it. To begin, Rudi dissolved the rye bread in water for two-to-three days to evaluate the flavors and aromas that developed. Pleased with the results, Rudi then added a large quantity of rye bread (5% of the total malt by weight) to the fermenting beer. In order to avoid any risk of infection the bread was transferred directly from his pizza oven to the fermenter, across separate buildings no less! By adding the rye bread to fermenter (instead of the brewkettle), the complex volatile flavors/ aromas are allowed to develop to a greater extent (in the brewkettle many of those flavor compounds would be boiled away). After primary fermentation, the yeast, hop residues, and residual bread were separated from the beer by centrifuge.

<u>Secondary Fermentation:</u> Four weeks in bottle with bottom-fermenting yeast, so as to eliminate any fruity or estery characteristics that could diminish the flavors and aromas of the rye.

## Flavors/Aromas:

Intense aromas of rye bread with a sophisticated, tart undercurrent from the rye malt. A deceptively simple and elegant beer hiding a disarming complexity.

- EBC: approx. 55-60 - IBU: approx. 17 - 5.2% ABV

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