Biała Podlaska #3 - Witbier - Browar na Wyżynie

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **15**
- SRM **3.1**
- Style **Witbier**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **6 %**
- Size with trub loss **23.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **27 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.3 liter(s)**
- Total mash volume **20.4 liter(s)**

Steps

- Temp **64 C**, Time **90 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **15.3 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **90 min** at **64C**
- Keep mash **10 min** at **78C**
- Sparge using **16.8 liter(s)** of **76C** water or to achieve **27 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	pilzneński Viking Malt	2 kg *(39.2%)*	80 %	5
Grain	zakwaszający	0.1 kg *(2%)*	80 %	---
Grain	płatki pszenne błyskawiczne	2.4 kg *(47.1%)*	70 %	1
Grain	płatki owsiane błyskawiczne	0.6 kg *(11.8%)*	70 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lubelski (PL) - granulat	20 g	60 min	4.2 %
Boil	Styrian Cardinal (SLO) - granulat	30 g	5 min	8.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM20 Białe Walonki	Wheat	Liquid	1000 ml	Fermentum Mobile

Extras

Type	Name	Amount	Use for	Time

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Water Agent	kwas mlekowy	5 g	Mash	100 min
Water Agent	woda demineralizowana	15000 g	Mash	100 min
Flavor	Skórka pomarańczy (6 pomarańczy)	100 g	Boil	5 min
Flavor	Skórka mandarynki (4 mandarynki)	50 g	Boil	5 min
Flavor	Skórka grejpfruta (1 grejpfrut)	25 g	Boil	5 min
Flavor	Skórka cytryny (1 cytryna)	15 g	Boil	5 min
Spice	Kolendra indyjska	10 g	Boil	5 min
Spice	curacao	20 g	Boil	5 min
Herb	Rumianek saszetka x 2	3 g	Boil	2 min

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