#2.1 Minium - Irish Red Ale - +10% chmielu

- Gravity 14.3 BLG
- ABV **5.9** %
- IBU **19**
- SRM 11.6
- Style Irish Red Ale

Batch size

- Expected quantity of finished beer 38 liter(s)
- Trub loss 5 %
- Size with trub loss 39.9 liter(s)
- · Boil time 90 min
- Evaporation rate 10 %/h
- Boil size 50.3 liter(s)

Mash information

- Mash efficiency 75 %
- Liquor-to-grist ratio 3 liter(s) / kg
- Mash size 31.2 liter(s)
- Total mash volume 41.6 liter(s)

Steps

- Temp 67 C, Time 60 min
 Temp 76 C, Time 5 min

Mash step by step

- Heat up 31.2 liter(s) of strike water to 74.8C
- Add grains
- Keep mash 60 min at 67C
- Keep mash 5 min at 76C
- Sparge using 29.5 liter(s) of 76C water or to achieve 50.3 liter(s) of wort

Fermentables

| Туре | Name | Amount | Yield | EBC |
|-------------|--------------------------------|------------------------|-------|-----|
| Grain | Maris Otter Crisp | 9.4 kg <i>(89.3%)</i> | 83 % | 6 |
| Grain | Caramel/Crystal Malt - 40L | 0.355 kg <i>(3.4%)</i> | 74 % | 79 |
| Grain | Caramel/Crystal Malt - 120L | 0.355 kg <i>(3.4%)</i> | 72 % | 236 |
| Dry Extract | WES ekstrakt słodowy jasny | 0.12 kg <i>(1.1%)</i> | 100 % | 30 |
| Grain | Fawcett - Dark Crystal | 0.3 kg <i>(2.8%)</i> | 71 % | 300 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|--------------------|--------|--------|------------|
| Boil | Kent Goldings | 55 g | 60 min | 5.5 % |
| Boil | East Kent Goldings | 11 g | 60 min | 5.1 % |

Yeasts

| Name | Туре | Form | Amount | Laboratory |
|------------------------------|------|--------|---------|------------------|
| FM13 Irlandzkie Ciemności | Ale | Liquid | 2000 ml | Fermentum Mobile |

Extras

| Туре | Name | Amount | Use for | Time |
|--------|----------|--------|---------|--------|
| Fining | Whirfloc | 2.5 g | Boil | 15 min |

Notes

· Na podstawie https://byo.com/article/irish-red-ale-style-profile/

Mill the grains and dough-in targeting a mash of around 1.5 quarts of water to 1 pound of grain (a liquor-to-grist ratio of about 3:1 by weight) and a temperature of 153 °F (67 °C). Hold the mash at 153 °F (67 °C) until enzymatic conversion is complete. Raise the temperature to mash out at 168 °F (76 °C). Sparge slowly with 170 °F (77 °C) water, collecting wort until the pre-boil kettle volume is around 6.5 gallons (24.6 L) and the gravity is 1.041 (10.3 °P).

The total wort boil time is 90 minutes. Add the bittering hops with 60 minutes remaining in the boil. Add Irish moss or other kettle finings with 15 minutes left in the boil. Chill the wort rapidly to 66 °F (19 °C), let the break material settle, rack to the fermenter and aerate thoroughly. Pitch the yeast. Use 10 grams of properly rehydrated dry yeast, 2 liquid yeast packages, or make an appropriate yeast starter. Ferment the wort at 66 °F (19 °C). When the fermentation is finished, carbonate the beer from 2 to 2.5 volumes.

Wody dolać do 13.2 BLG.\

/* Jest więcej chmielu niż poprzednio, ze względu na rozcieńczanie

/* Tym razem większe wysycenie - czyli 2,5 CO2 *May 20, 2022, 11:02 AM*