

## Gwoździe i banany vol.2

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **24**
- SRM **15.1**
- Style **Dunkelweizen**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **12.6 liter(s)**
- Total mash volume **17.7 liter(s)**

### Steps

- Temp **44 C**, Time **15 min**
- Temp **63 C**, Time **15 min**
- Temp **72 C**, Time **45 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **12.6 liter(s)** of strike water to **48.8C**
- Add grains
- Keep mash **15 min** at **44C**
- Keep mash **15 min** at **63C**
- Keep mash **45 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **17.8 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

| Type  | Name                         | Amount         | Yield | EBC |
|-------|------------------------------|----------------|-------|-----|
| Grain | Pszeniczny                   | 2.5 kg (49.5%) | 85 %  | 4   |
| Grain | Monachijski                  | 2 kg (39.6%)   | 80 %  | 16  |
| Grain | Strzegom Wiedeński           | 0.15 kg (3%)   | 79 %  | 10  |
| Grain | Monachijski Ciemny Steinbach | 0.2 kg (4%)    | 100 % | 30  |
| Grain | Czekoladowy                  | 0.2 kg (4%)    | 60 %  | 788 |

### Hops

| Use for | Name    | Amount | Time   | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil    | Marynka | 22 g   | 60 min | 10 %       |

### Yeasts

| Name                               | Type  | Form  | Amount | Laboratory      |
|------------------------------------|-------|-------|--------|-----------------|
| Mangrove Jack's M20 Bavarian Wheat | Wheat | Slant | 150 ml | Mangrove Jack's |