

Braggot (FES + miód spadziowy iglasty)

- Gravity **25.7 BLG**
- ABV **12.1 %**
- IBU **141**
- SRM **57**
- Style **Foreign Extra Stout**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.8 liter(s)**
- Total mash volume **18.4 liter(s)**

Fermentables

| Type | Name | Amount | Yield | EBC |
|----------------|-------------------------------|----------------|-------|------|
| Grain | Viking Pale Ale malt | 3 kg (40.5%) | 80 % | 5 |
| Grain | Caraaroma | 0.3 kg (4.1%) | 78 % | 400 |
| Grain | Weyermann - Dehusked Carafa I | 0.3 kg (4.1%) | 70 % | 690 |
| Grain | Jęczmień palony | 0.3 kg (4.1%) | 55 % | 985 |
| Grain | Strzegom Czekoladowy ciemny | 0.3 kg (4.1%) | 68 % | 1200 |
| Grain | Płatki owsiane | 0.4 kg (5.4%) | 85 % | 3 |
| Liquid Extract | Miód Spadziowy Iglasty | 2.8 kg (37.8%) | 70 % | 40 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|------------------------|--------|----------|------------|
| Boil | Columbus/Tomahawk/Zeus | 25 g | 60 min | 15.5 % |
| Aroma (end of boil) | Simcoe | 25 g | 10 min | 13.2 % |
| Aroma (end of boil) | Northern Brewer | 25 g | 10 min | 9 % |
| Aroma (end of boil) | Chinook | 25 g | 10 min | 13 % |
| Whirlpool | Simcoe | 50 g | 80 min | 13 % |
| Whirlpool | Northern Brewer | 50 g | 80 min | 9 % |
| Whirlpool | Chinook | 50 g | 80 min | 13 % |
| Dry Hop | Simcoe | 50 g | 5 day(s) | 13.2 % |
| Dry Hop | Northern Brewer | 50 g | 5 day(s) | 9 % |
| Dry Hop | Chinook | 50 g | 5 day(s) | 13 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

| | | | | |
|---------------------|-----|-----|------|-----------|
| Mangrove Mead yeast | Ale | Dry | 10 g | Mangrove |
| Safale US-05 | Ale | Dry | 12 g | Fermentis |