

## 13. BIPA + łuska kakaowa, cold brew

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **62**
- SRM **23.7**
- Style **Black IPA**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **4 %**
- Size with trub loss **21.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **12.5 %/h**
- Boil size **25.2 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **23.9 liter(s)**
- Total mash volume **30.7 liter(s)**

### Steps

- Temp **68 C**, Time **70 min**
- Temp **78 C**, Time **5 min**

### Mash step by step

- Heat up **23.9 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **70 min** at **68C**
- Keep mash **5 min** at **78C**
- Sparge using **8.1 liter(s)** of **76C** water or to achieve **25.2 liter(s)** of wort

### Fermentables

| Type  | Name                 | Amount         | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Strzegom Pale Ale    | 5.1 kg (74.7%) | 79 %  | 6   |
| Grain | Strzegom Karmel 150  | 0.35 kg (5.1%) | 75 %  | 150 |
| Grain | Pszeniczny           | 0.6 kg (8.8%)  | 81 %  | 4   |
| Grain | Strzegom Karmel 30   | 0.35 kg (5.1%) | 75 %  | 30  |
| Grain | Weyermann - Carafa I | 0.43 kg (6.3%) | 1 %   | 690 |

### Hops

| Use for             | Name    | Amount | Time     | Alpha acid |
|---------------------|---------|--------|----------|------------|
| Boil                | Iunga   | 45 g   | 60 min   | 11 %       |
| Aroma (end of boil) | Simcoe  | 15 g   | 5 min    | 13.2 %     |
| Aroma (end of boil) | Jarrylo | 15 g   | 5 min    | 15 %       |
| Aroma (end of boil) | Comet   | 15 g   | 5 min    | 8.3 %      |
| Whirlpool           | Simcoe  | 20 g   | 0 min    | 13.2 %     |
| Whirlpool           | Jarrylo | 20 g   | 0 min    | 15 %       |
| Dry Hop             | Comet   | 41 g   | 2 day(s) | 8.3 %      |
| Dry Hop             | Simcoe  | 35 g   | 2 day(s) | 13.2 %     |
| Dry Hop             | Jarrylo | 25 g   | 2 day(s) | 15 %       |

## Yeasts

| Name         | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale  | Dry  | 11 g   | Fermentis  |

## Extras

| Type   | Name          | Amount | Use for   | Time     |
|--------|---------------|--------|-----------|----------|
| Other  | cold brew     | 500 g  | Secondary | 1 day(s) |
| Flavor | łuska kakaowa | 250 g  | Boil      | 10 min   |