

78: Mango Habanero IPA

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Category: 21 – Spice/Herb/Vegetable Beer
Subcategory: A – Spice, Herb, or Vegetable Beer



Kettle Volume: 6.83 gal (1.051)	Efficiency: 73.22%
Boil Duration: 1.25 h	Attenuation: 80.0%
Evaporation: 1.12 gal	Evap./Hour: 0.9 gal
Water Volume Added: -0.0 gal	
Final Volume: 5.5 gal (15.5 °P)	

Ingredients:

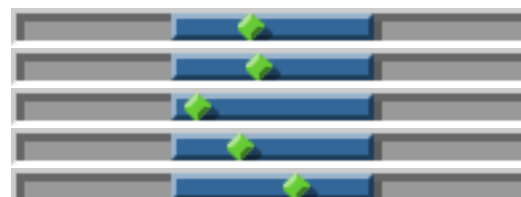
12.0 lb (88.9%) Premium 2-Row Malt; Great Western
1.0 lb (7.4%) Organic Munich; Great Western
0.5 lb (3.7%) Crystal 60; Crisp
30.0 g (20.0%) Citra (11.4%) – added during boil, boiled 60 m
30.0 g (20.0%) Citra (11.4%) – added during boil, boiled 20 m
0.5 ea Whirlfloc Tablets (Irish moss) – added during boil, boiled 15 m
30.0 g (20.0%) Citra (11.4%) – added during boil, boiled 10 m
30.0 g (20.0%) Citra (11.4%) – steeped after boil
30.0 g (20.0%) Citra (11.4%) – added dry to secondary fermenter
3.0 oz Habanero pepper – added dry to secondary fermenter
2.0 L WYeast 1272 American Ale II
5.0 mL BioFine Clear A3 – added dry to secondary fermenter

Water:

8.3 gal Durango, CO
2.0 g Calcite (Calcium Carbonate)
5.0 g Gypsum (Calcium Sulfate)

Style:

Recipe	Guideline
Original Gravity: 15.5 °P	6.57 – 28.05
Terminal Gravity: 1.013	0.995 – 1.035
Color: 8.05 SRM	1.0 – 50.0
Alcohol: 6.66%	2.5% – 14.5%
Bitterness: 62.5	0.0 – 100.0



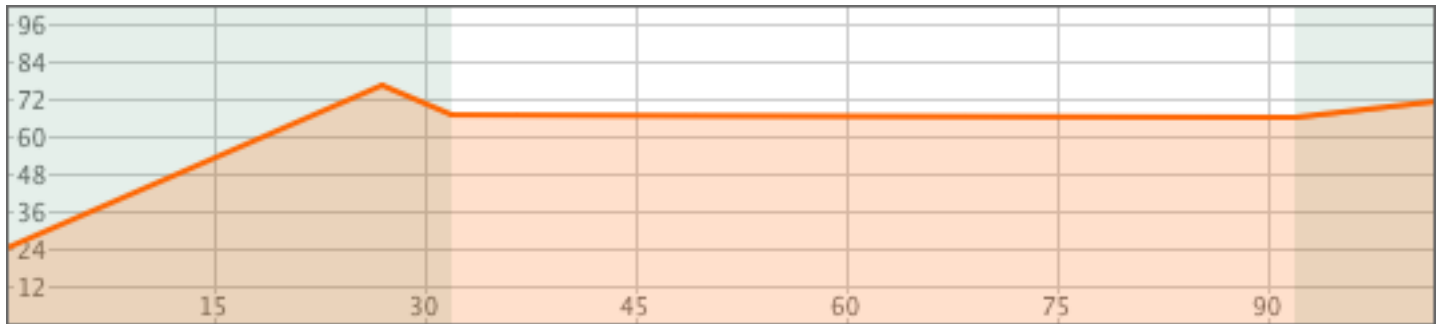
Analysis:

Apparent	Real	Weight	Calories
Original Extract: 15.5 °P	15.5 °P	Alcohol: 25.02 g	172.66 kcal
Attenuation: 80.0%	64.1%	Carbs: 26.21 g	99.59 kcal
Terminal Extract: 3.23 °P	5.57 °P	Protein: 1.83 g	7.34 kcal
% Alcohol: 6.66% ABV	5.22% ABW		Total: 279.59 kcal

Schedule:

Ambient Air: 25 °C
Source Water: 20 °C
Elevation: 6600 ft

	Elapsed	Thickness	Final Temp.	Available
31.9 m Mash In <i>Liquor: 5.0 gal</i> <i>Strike: 77.14 °C</i> <i>Target: 68.0 °C</i>	00:31:56	3.09 L/kg	68.0 °C	3.38 gal
60 m Saccharification Rest <i>Rest: 60 m</i> <i>Final: 67.5 °C</i>	01:31:56	3.09 L/kg	67.5 °C	3.38 gal
10.0 m Batch Sparge <i>Sparge #1</i> <i>Volume: 3.27 gal</i> <i>Temperature: 85 °C</i> <i>Duration: 10 m</i> <i>Total Runoff: 6.73 gal</i>	01:41:56	0.0 L/kg	72.4 °C	0.0 gal



Carbonation:

Natural Conditioning

Beer Temp: 68.0 °F
Priming Agent Rate: 4.02 g/L
Priming Agent Mass: 122.3 g
Volumes CO2: 2.4

Forced Carbonation

Beer Temp: 30 °C
Pressure: 36.62 PSI
Volumes CO2: 2.4

Volume Adjustments:

-100 mL Kettle
-.25 gal Fermenter

Notes:

500 mL, 1.5 L yeast propagations.
CaCO₃ in mash; CaSO₄ in boil.
Actual mash temp 68.5°C; pH ~5.2 before CaCO₃, ~5.4 after.
First runnings: 17.2°P
Second runnings: 7.5°P
Pre-boil: 12.5°P, 7.0 gal. Boiled 90 min.
Post-boil: 15.5°P, 5.3 gal
10 min whirlpool; 10 min hot stand; 25 min KO at 76°F. Aerated 25 min and pitched at 68°F.
Fermentation: 3 days at 68°F, 3 days at 72°F. Dry hops and deseeded peppers added on day 7; cold crashed to 44°F on day 13. Kegged on day 14 and conditioned 5 days at 44°F.