Date	Operators			Time
8/31/2015	Zhichun Zheng		eng	13:15
Botanical Material	Duration		Cool Down	
star anise	5:30		4 min in microwave, 2 min countertop	
lid mass:	136.29		initial ice mass:	216.4
lid+ice mass:	352.69		final ice mass:	104.5
lid +remaining ice mass:	240.79			
apparatus +inner shie	apparatus +inner shield mass:			50.07
apparatus +inner shield	before:	1084.23 1152.36	botanical mass: botanical mass lost:	14.43
w/botanical & solvent mass	after:	1137.93	%yield by mass	1.18%
beaker mass:		125.99	, ,	
beaker+hydrosol mass:		250.9	hydrosol mass	124.91
,			· ·	
vial mass:	3.33			
vial mass+oil mass :	3.92			
oil mass:	0.59			
Notes:	20 ml water was added to the extractor and mixed with plant material. About 0.60 cm layer oil collected. Oil was transparent. A lot of oil stayed on ice core due to high melting point.			
Botanical Description: (prior to extraction)	brown, frozen. Grinded into <3mm particles and mixed with 20 ml water.			
Botanical Description: (post extraction)	still moist.			

Date	Operators			Time	
9/1/2015	Zhichun Zheng			13:22	
Botanical Material	Duration		Cool Down	Cool Down	
star anise	5:30		4 min in microwave, 7 min countertop		
lid mass:	136.35		initial ice mass:	181.66	
lid+ice mass:	318.01		final ice mass:	35.95	
lid +remaining ice mass:	17	172.3			
apparatus +inner shie	ld mass:	1084.55	botanical mass:	50.02	
apparatus +inner shield	before:	1162.89	botanical mass lost:	19.38	
w/botanical & solvent mass	after:	1143.51	%yield by mass	1.10%	
beaker mass:	beaker mass:				
beaker+hydrosol n	nass:	295.2	hydrosol mass	169.23	
vial mass:	3.3				
vial mass+oil mass:	3.85				
oil mass:	0.55				
Notes:	30 ml water was added to the extractor and mixed with plant material. Opened the extractor after 4 min cool down, saw a lot of oil frozen on the ice core, therefore put it back for 7 extra min. Used some water to flush off the oil on ice cord. ~0.6 to 0.7 cm layer, slightly more than trial #1. Notes to self: maybe increase cooking time or increase amount of water add to the plant material next time.				
Botanical Description: (prior to extraction)	brown, frozen. Grinded into <3mm particles and mixed with 30 ml water.				
Botanical Description: (post extraction)	slightly moist, mostly dry				

Date	Operators			Time
9/1/2015	Zhichun Zheng			14:14
Botanical Material	Duration		Cool Down	
star anise	5:30		4 min in microwave, 2 min countertop	
lid mass:	136.7		initial ice mass:	179.73
lid+ice mass:	316.43		final ice mass:	n/a
lid +remaining ice mass:	ice dropped into beaker			
apparatus +inner shie	apparatus +inner shield mass:		botanical mass:	50.07
apparatus +inner shield	before:	1183.76	botanical mass lost:	25.57
w/botanical & solvent mass	after:	1158.19	%yield by mass	maybe about 2 %
beaker mass:		125.98		
beaker+hydrosol mass:		325.94	hydrosol mass	199.96
vial mass:			3.33	
vial mass+oil mass :	n/a			
oil mass:	n/a n/a			
Notes:	50 ml water was added to the extractor and mixed with plant material. About 1.2 to 1.3 cm layer oil collected (which is twice the amount collected from trial #2. Oil was transparent. A lot of oil observed on the outside of beaker			
Botanical Description: (prior to extraction)	brown, frozen. Grinded into <3mm particles and mixed with 50 ml water.			
Botanical Description: (post extraction)	still moist.			

Date	Operators			Time
10/9/2015	Zhichun Zheng		eng	13:20
Botanical Material	Duration		Cool Down	
star anise	5:30		4 min in microwave, 2 min countertop	
lid mass:	138.12		initial ice mass:	180.66
lid+ice mass:	318.78		final ice mass:	17.78
lid +remaining ice mass:	155.9			
apparatus +inner shie	old mass:	1088.18	botanical mass:	30.21
apparatus +inner shield	before:	1167.71	botanical mass lost:	23.08
w/botanical & solvent mass	after:	1144.63	%yield by mass	1.75%
beaker mass:		126	, ,	
beaker+hydrosol mass:		307.75	hydrosol mass	181.75
vial mass:	3.33			
vial mass+oil mass :	3.86			
oil mass:	0.53			
Notes:	50 ml water was added to the extractor and mixed with plant material. A lot of oil ends up staying on the ice core. So I put the entire icecore in hydrosol. There were still a lot of oil in hydrosol but all broken into small droplets and hard to collect.			
Botanical Description: (prior to extraction)	brown, frozen. Grinded into <3mm particles and mixed with 50 ml water.			
Botanical Description: (post extraction)	still moist.			