

Fendt IDEAL Crop Settings Guide



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IMPORTANT: The settings and recommendations included in this guide are provided only as a starting reference. As crops and conditions vary, YOU as the operator are responsible for physical performance checks and proper adjustments to suit your preferences and conditions.

Terminology used in this guide:

Concave Type: The first 4 threshing concaves below each rotor. Changeable to suit crop. All recommendations are listed in order from position 1 to position 4.

RB – Round Bar

LW – Large wire

HC – Small wire high capacity, also known as All Crop

SW – Small wire

Separation Grates: The last 6 separation grates below each rotor. Changeable to suit each crop. All recommendations are listed in order from position 1 to position 6.

Finger – Finger style grates used for small grains

Wire – Bar and wire style grates used for large grains

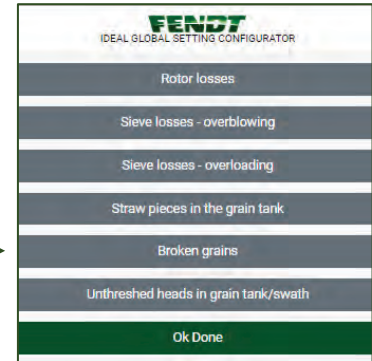
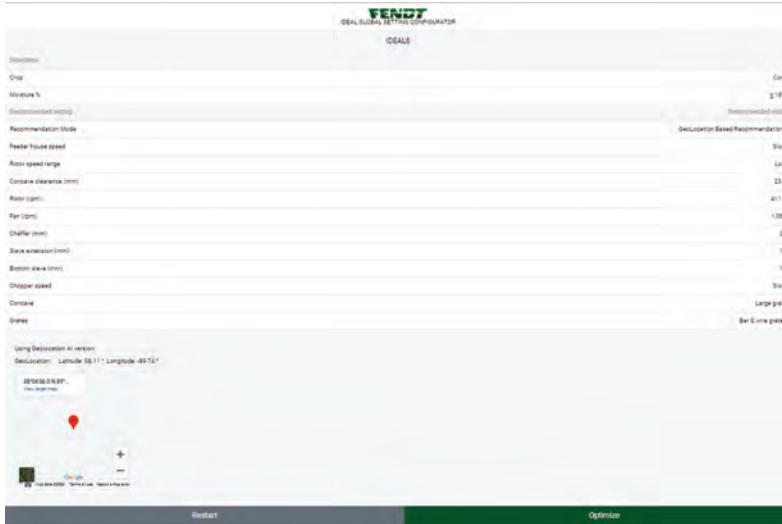
Chaffer: The top cleaning sieve.

Chaffer Extension: The rear portion of the chaffer that can be manually set at an opening dimension less than or greater than the relative position of the electrically adjustable main body.

Sieve: The lower cleaning sieve.

Fendt IDEAL Global Settings Configurator

The **IDEAL Global Settings Configurator**, located in the AGCO Sales Assistant Mobile App now includes a ZIP-code based feature to allow more accurate starting settings. This feature combines weather reports and telemetry data from multiple harvesters in the same region.



Selecting **Optimize** will lead you through the steps to reduce losses, improve grain quality, and improve harvest efficiency based on visual checks.

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Fendt IDEAL Crop Settings – Alfalfa, Clover

Rotor Speed	700	Feederhouse Drum	Low/Floating
Concave in (mm)	.60 (15)	Feeder 2 Speed	High
Cleaning Fan	450*	Concave Type	SW, SW, HC, HC
Chaffer in (mm)	.55 (14)	Separation Grates	Finger
Chaffer Extension in (mm)	.63 (16)	Chaffer	Small Grain
Sieve in (mm)	.39 (10)	Sieve	Small Grain
Tailings Covers	Ribbed/Smooth	Chopper Speed	High
		Stationary Knife	½ to full in

IDEAL Tips:

- * Shoe vanes should be installed

Notes:

Fendt IDEAL Crop Settings – Barley

Rotor Speed	750 - 900	Feederhouse Drum	Low/Floating
Concave in (mm)	.32 -.51 (8-13)	Feeder 2 Speed	High
Cleaning Fan	800 - 900	Concave Type	SW, SW, HC, HC
Chaffer in (mm)	.60 -.79 (15 - 20)	Separation Grates	Finger
Chaffer Extension in (mm)	.12 - .25 (3 - 6) less than chaffer setting	Chaffer	Small Grain
Sieve in (mm)	.32 -.47 (8 - 12)	Sieve	Small Grain
Tailings Covers	Ribbed/Smooth	Chopper Speed	High
		Stationary Knife	½ to full in



Crop Moisture %	- 16
Rotor Speed	750
Fan Speed	850

IDEAL Tips:

Fendt IDEAL Crop Settings – Canola

Rotor Speed	600 - 900	Feederhouse Drum	Low/Floating
Concave in (mm)	.39 -.79 (10 - 20)	Feeder 2 Speed	High
Cleaning Fan	650 – 750	Concave Type	SW, SW, HC, HC
Chaffer in (mm)	.51 -.79 (13 - 20)	Separation Grates	BL, Finger
Chaffer Extension in (mm)	.12 - .25 (3 - 6) less than chaffer setting	Chaffer	Small Grain
Sieve in (mm)	.25 -.67 (6 - 17)	Sieve	Small Grain
Tailings Covers	Smooth	Chopper Speed	High
		Stationary Knife	½ to full in



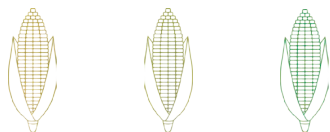
Crop Moisture %	Dry	Moderate	Green
Rotor Speed	650 - 750	700 - 750	750 - 850
Concave Clearance	.6 - .8	.5 - .6	.4 - .5

IDEAL Tips:

Notes:

Fendt IDEAL Crop Settings – Corn (Dry) Less than 25% moisture

Rotor Speed	280 - 360	Feederhouse Drum	High/Fixed
Concave in (mm)	.71 - 1.2 (18 - 30)	Feeder 2 Speed	Low
Cleaning Fan	900 - 1100	Concave Type	LW, RB, RB, RB
Chaffer in (mm)	.71 - 1.0 (18 - 25)	Separation Grates	Wire Grates
Chaffer Extension in (mm)	.12 - .25 (3 – 6) less than chaffer setting	Chaffer	Large Grain
Sieve in (mm)	.71 - .79 (18 - 22)	Sieve	Large Grain
Tailings Covers	Smooth / Toothed	Chopper Speed	Low
		Stationary Knife	Out



Crop Moisture %	- 15	15 - 20	20 - 24
Rotor Speed	280 - 300	320 - 340	340 - 360
Concave Clearance	Set to .05 inch (1.5 mm) less than cob diameter		
Fan Speed	900	1000	1100

IDEAL Tips:

- Run the separator full to reduce rotor loss
- Limit tailings to improve throughput
- Hard threshing varieties may require rotor speeds up to 500
- Add toothed tailings cover if corn is left on cob pieces

Fendt IDEAL Crop Settings – Corn (Wet) 25% or greater

Rotor Speed	350 - 520	Feederhouse Drum	High/Fixed
Concave in (mm)	.80 - 1.2 (20 - 30)	Feeder 2 Speed	Low
Cleaning Fan	1100 - 1300	Concave Type	LW, RB, RB, RB
Chaffer in (mm)	.80 - 1.3 (20 - 33)	Separation Grates	Wire Grates
Chaffer Extension in (mm)	.12 - .25 (3 – 6) less than chaffer setting	Chaffer	Large Grain
Sieve in (mm)	.71 - .79 (18 - 22)	Sieve	Large Grain
Tailings Covers	Smooth	Chopper Speed	Low
		Stationary Knife	Out



Crop Moisture %	25	26 - 31	32
Rotor Speed	350 - 360	380 - 420	440 - 450
Concave Clearance	Set to .05 inch (1.5 mm) less than cob diameter		
Fan Speed	1100	1200	1300

IDEAL Tips:

- Run the separator full to reduce rotor loss
- Rotor losses and the required speed are more sensitive to plant moisture than grain moisture
- If more threshing is needed, add a LW concave in the 2nd position, but watch for concave plugging.
- Limit tailings to improve throughput

Fendt IDEAL Crop Settings – Edible Beans

Rotor Speed	400	Feederhouse Drum	Fixed
Concave in (mm)	1.38 (35)	Feeder 2 Speed	High
Cleaning Fan	1000	Concave Type	RB, RB, RB, RB
Chaffer in (mm)	1.10 (28)	Separation Grates	Finger
Chaffer Extension in (mm)	.12 - .25 (3 – 6) less than chaffer setting	Chaffer	Large Grain
Sieve in (mm)	1.02 (26)	Sieve	Large Grain
Tailings Covers	Smooth	Chopper Speed	High
		Stationary Knife	½ in



IDEAL Tips:

Notes:

Fendt IDEAL Crop Settings – Milo/Sorghum

Rotor Speed	600 - 700	Feederhouse Drum	Float
Concave in (mm)	.39 -.79 (10 – 20)	Feeder 2 Speed	High
Cleaning Fan	700 - 800	Concave Type	SW, SW, HC, HC
Chaffer in (mm)	.47 -.63 (12 - 16)	Separation Grates	BL, BL, F, F, F, F
Chaffer Extension in (mm)	.12 - .25 (3 - 6) less than chaffer setting	Chaffer	Small Grain
Sieve in (mm)	.24 -.39 (6 -10)	Sieve	Small Grain
Tailings Covers	Smooth	Chopper Speed	High
		Stationary Knife	½ to full in



Crop Moisture %	15	20-24	25+
Rotor Speed	600	700	700+

IDEAL Tips:

- Large grain configuration can be used to harvest many varieties with positive results

Fendt IDEAL Crop Settings – Oats

Rotor Speed	750 - 1000	Feederhouse Drum	Float
Concave in (mm)	.39 - .59 (10 - 15)	Feeder 2 Speed	High
Cleaning Fan	800	Concave Type	SW, SW, HC, HC
Chaffer in (mm)	.62 (16)	Separation Grates	Finger
Chaffer Extension in (mm)	+.08 (2mm) greater than chaffer setting	Chaffer	Small Grain
Sieve in (mm)	.47 (12)	Sieve	Small Grain
Tailings Covers	Smooth	Chopper Speed	High
		Stationary Knife	Out to ½



IDEAL Tips:

- Gentle handling of the crop will minimize shoe loading and result in increased capacity potential, particularly in dry crop conditions.

Fendt IDEAL Crop Settings – Peas

Rotor Speed	400	Feederhouse Drum	Fixed
Concave in (mm)	1.38 (35)	Feeder 2 Speed	High
Cleaning Fan	1000	Concave Type	LW, RB, RB, RB
Chaffer in (mm)	1.10 (28)	Separation Grates	Finger
Chaffer Extension in (mm)	.12 - .25 (3 – 6) less than chaffer setting	Chaffer	Large Grain
Sieve in (mm)	1.02 (26)	Sieve	Large Grain
Tailings Covers	Smooth	Chopper Speed	High
		Stationary Knife	½ in



IDEAL Tips:

Notes:

Fendt IDEAL Crop Settings – Popcorn

Rotor Speed	300 - 400	Feederhouse Drum	Fixed
Concave in (mm)	.35 (9)	Feeder 2 Speed	Low
Cleaning Fan	900 - 1100	Concave Type	LW, RB, RB, RB
Chaffer in (mm)	.59 - .91 (15 - 23)	Separation Grates	Wire Grates
Chaffer Extension in (mm)	Same as chaffer setting	Chaffer	Large Grain
Sieve in (mm)	.51 - .79 (13 - 20)	Sieve	Large Grain
Tailings Covers	Smooth	Chopper Speed	Low

Stationary Knife Out



Crop Moisture %	14-18		
Rotor Speed	370		
Concave Clearance	.35		
Fan Speed	950		

IDEAL Tips:

Fendt IDEAL Crop Settings – Rye

Rotor Speed	850	Feederhouse Drum	Low
Concave in (mm)	.47 (12)	Feeder 2 Speed	High
Cleaning Fan	800 - 900	Concave Type	SG, SG, HC, HC
Chaffer in (mm)	.63 (16)	Separation Grates	Finger
Chaffer Extension in (mm)	.12 - .25 (3 – 6) less than chaffer setting	Chaffer	Small Grain
Sieve in (mm)	.47 (12)	Sieve	Small Grain
Tailings Covers	Ribbed/Smooth	Chopper Speed	High
		Stationary Knife	½ in



IDEAL Tips:

Fendt IDEAL Crop Settings – Soybeans

Rotor Speed	500 - 720	Feederhouse Drum	High
Concave in (mm)	.60 - .87 (15-22)	Feeder 2 Speed	High
Cleaning Fan	800 - 900	Concave Type	LW, RB, RB, RB
Chaffer in (mm)	.67 - .79 (17 - 20)	Separation Grates	Wire Grates
Chaffer Extension in (mm)	.12 - .25 (3 – 6) less than chaffer setting	Chaffer	Large Grain
Sieve in (mm)	.55 - .63 (14 - 16)	Sieve	Large Grain
Tailings Covers	Smooth/Ribbed	Chopper Speed	High
		Stationary Knife	½ in



Crop Moisture %	8-10	11-13	14-15+
Rotor Speed	500-550	550-600	600-650
	* Increase by 50 rpm for green stem		

IDEAL Tips:

- Limit rotor speed in dry crop to improve cleaning shoe performance
- Close concave to reduce splits
- Install ribbed returns cover plate to reduce unthreshed pods
- Keep rotor RPM up in green stem to maintain rotor feeder performance

Notes:

Tips for harvesting Sunflowers:

Broken grain? Assume this is from tailings. Decrease chaffer clearance, or increase sieve clearance.



Dirty sample? Increase fan speed.

Rotor loss? Decrease concave clearance or increase rotor speed.

Plugging or wrapping? Increase rotor speed.

Active Tailboard Spinners: Keep below 70% to reduce potential damage from large debris.

Fendt IDEAL Crop Settings – Sunflower

Confection-type		23lb/bu
Rotor		400
Concave		1.5 (38)
Fan Speed		850
Chaffer		.71 (18)
Chaffer Extension		.08 - .16 (2 – 4) greater than chaffer setting
Sieve		.31 (8)
Tailings Covers		Smooth
Oil-type		28lb/bu
Rotor		380
Concave		1.5 (38)
Fan Speed		950
Chaffer		.63 (16)
Chaffer Extension		.08 - .16 (2 – 4) greater than chaffer setting
Sieve		.24 (6)
Tailings Covers		Smooth

Feederhouse Drum	High
Feeder 2 Speed	Low
Concave Type	RB, RB, BW, BW
Separation Grates	Finger
Chaffer	Large Grain
Sieve	Large Grain
Chopper Speed	High
Stationary Knife	Out

IDEAL Tips:

- Factory LW, RB, RB, RB, concaves may require reduced concave clearance
- Run 2 smooth tailings covers for best grain quality

Fendt IDEAL Crop Settings – Triticale

Rotor Speed	850	Feederhouse Drum	Low/Floating
Concave in (mm)	.39 (10)	Feeder 2 Speed	High
Cleaning Fan	800 - 900	Concave Type	SW, SW, HC, HC
Chaffer in (mm)	.63 (16)	Separation Grates	Finger
Chaffer Extension in (mm)	.12 - .25 (3 – 6) less than chaffer setting	Chaffer	Small Grain
Sieve in (mm)	.47 (12)	Sieve	Small Grain
Tailings Covers	Ribbed/Smooth	Chopper Speed	High
		Stationary Knife	½ in



IDEAL Tips:

Fendt IDEAL Crop Settings – Wheat

Rotor Speed	750 - 1150	Feederhouse Drum	Low/Floating
Concave in (mm)	.12 - .47 (3 - 12)	Feeder 2 Speed	High
Cleaning Fan	800 - 900	Concave Type	SW, SW, HC, HC
Chaffer in (mm)	.50 - .71 (13 - 18)	Separation Grates	BL, BL, F, F, F, F
Chaffer Extension in (mm)	Adjust to suitable tailings content and volume	Chaffer	Small Grain
Sieve in (mm)	.31 - .47 (8 - 12)	Sieve	Small Grain
Tailings Covers	Ribbed/Smooth	Chopper Speed	High
		Stationary Knife	½ to full in



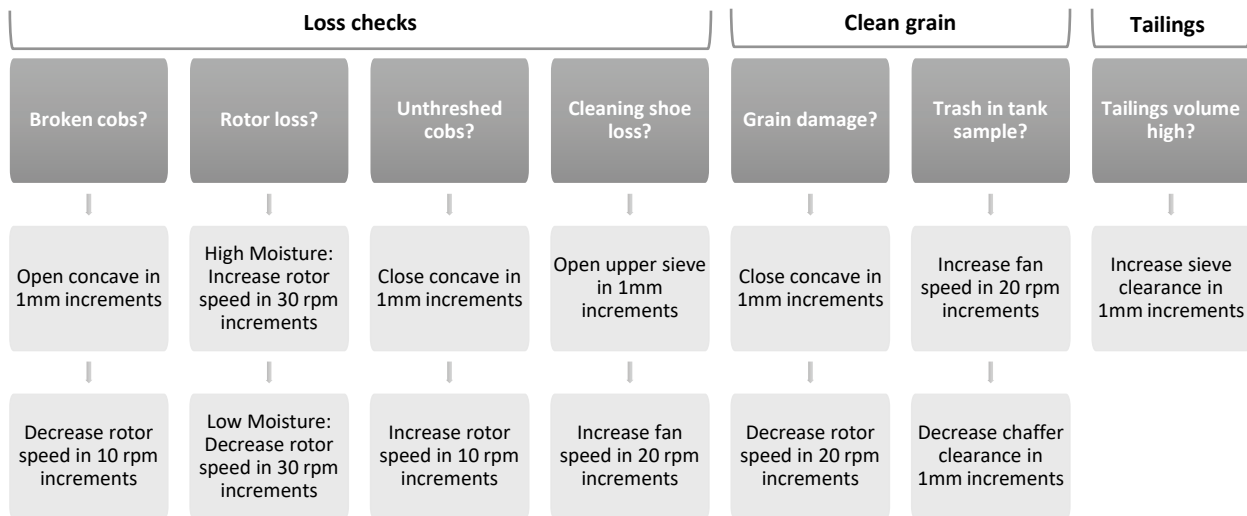
Hard Threshing	Low	Medium	High
Concave Cover Plates	0	1 - 2	2

IDEAL Tips:

- Run as much rotor speed as possible without grain damage
- Keep the processor full or the concave tight
- Add concave covers starting at the front for improved threshing
- Add ribbed tailings return covers to reduce white caps in the clean grain

Notes:

Fendt IDEAL Settings Optimization – Corn

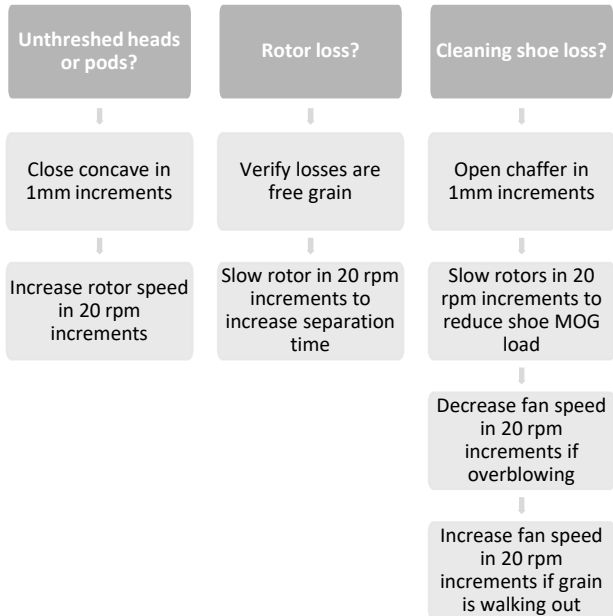


IDEAL Tips:

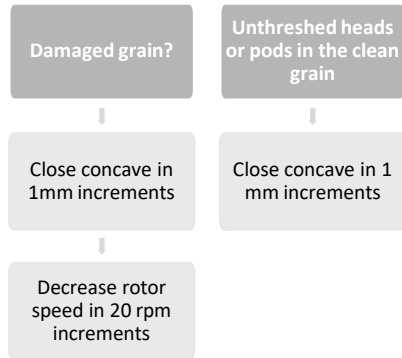
- **Important:** The combine should be fully loaded with crop before optimizing. When in doubt, increase throughput until engine load becomes the limit
- Set concave to cob diameter minus .05 in (1-2mm)
- Operate at a consistent crop throughput
- Allow enough time between adjustments for stabilization

Fendt IDEAL Settings Optimization – Small Grains / Soybeans

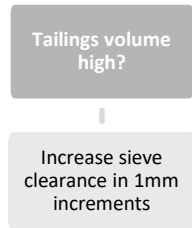
Loss checks



Clean grain



Tailings



IDEAL Tips:

- Perform each optimization in increments while monitoring for changes
- Allow enough time between adjustments for stabilization
- Operate at a consistent crop throughput

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Fendt IDEAL Crop Settings – Grain Loss Checks

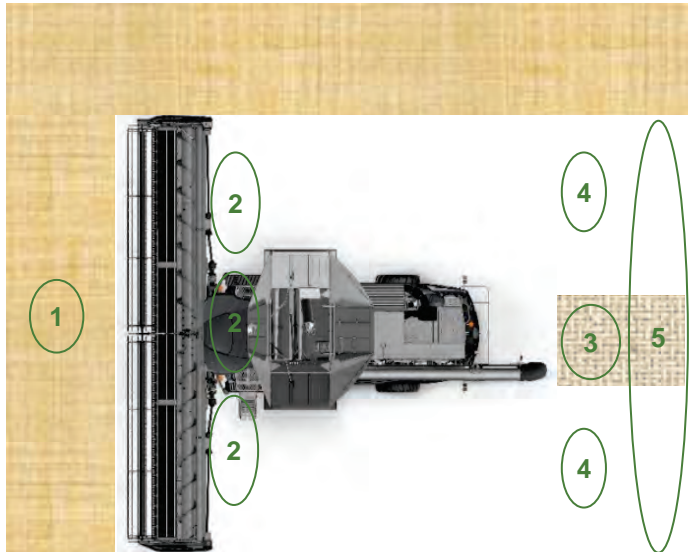
In order to make an accurate assessment of machine performance, potential losses from each step in the harvest process should be accounted.

To make an accurate loss assessment, we should know:

- Where are the losses coming from?
- How do we measure grain loss?
- How do we calculate grain loss?

Types of Grain Loss

1. Field loss
2. Header loss
3. Rotor Loss
4. Cleaning/Shoe Loss
5. Total Loss



*Pre-harvest and header losses found at locations 1 and 2 should be subtracted from those found at 3, 4, and 5 when assessing processor performance.

Fendt IDEAL Crop Settings – Grain Loss Checks

Quick Check for Combine Losses – Grains per Square Foot

In a quick check, grain loss is calculated per square foot of checked area or drop pan.

- All crop discharge should be chopped and spread
- Count the number of seeds found per square foot behind the combine
- Check at multiple locations across the spread width to create a more accurate average

Seed Count Per Square Foot

Wheat	19
Corn	2
Soybeans	5
Canola	111

If losses are determined to be unacceptable, it will be necessary to determine the quantity of loss from the rotor separately from the quantity from the shoe using the **Advanced Check**.

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Fendt IDEAL Crop Settings – Grain Loss Checks

Advanced Check for Combine Losses – Full Swath Width

In an advanced check, the full width of the swath is collected, and losses from the rotor and shoe can be collected separately.

- Windrow the rotor discharge
- Divide the chaff spreader discharge to the sides
- Collect a one foot by full width sample of the windrowed discharge
- Compare to the tables below to determine the quantity of rotor loss

Total Grains Per Swath to Equal One Bushel (Est.)							Total Weight Per Swath to Equal One Bushel (Est.)						
	20 ft.	25 ft.	30 ft.	35 ft.	40 ft.	45 ft.		20 ft.	25 ft.	30 ft.	35 ft.	40 ft.	45 ft.
Wheat	380	475	570	665	760	855	Wheat (g)	12.4	15.5	18.6	21.7	24.8	27.9
Corn	40	50	60	70	80	90	Corn (g)	11.2	14.0	16.8	19.6	22.4	25.2
Beans	100	125	150	175	200	225	Beans (g)	12.4	15.5	18.6	21.7	24.8	27.9
Canola	2230	2775	3330	3885	4440	4995	Canola (g)	10.4	13	15.6	18.2	20.8	23.4
Canola by Weight (g)	10.4	13	15.6	18.2	20.8	23.4	Canola by Volume (ml)	24	30	36	42	48	54
Canola by Volume (ml)	24	30	36	42	48	54							



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