



ADAMA

PROTECT YOUR **CANOLA**

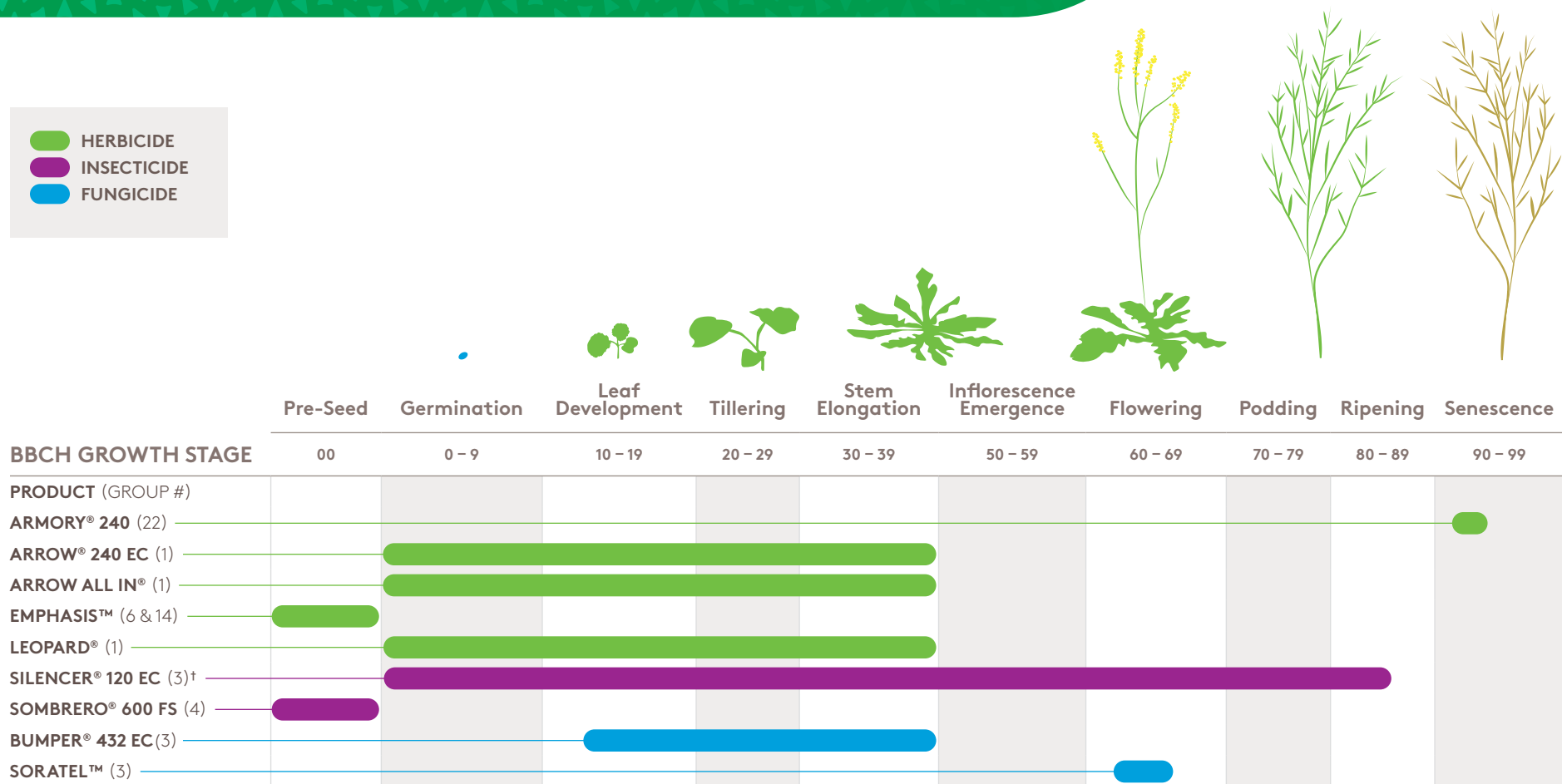
HERBICIDE

INSECTICIDE

FUNGICIDE

CANOLA GROWTH STAGES

■ HERBICIDE
■ INSECTICIDE
■ FUNGICIDE



Timing based on using the product alone. Please refer to tank-mix partners label for crop timing.

† Dependent on PHI (7 days)

DECISION MATRIXES

CANOLA

PRE-SEED BROAD SPECTRUM WEED CONTROL

Carfentrazone-ethyl & Bromoxynil Group 14 & 6

- Non residual
- Two modes of action, when mixed with glyphosate third mode is added to fight Group 2, 9 resistant weeds
- Fast knockdown
- For best results spray in the heat of the day with adequate water to ensure adequate coverage
- Can be applied immediately before seeding canola
- Effective against volunteer canola, kochia and cleavers



EMPHASIS™

IN CROP GRASSY WEED CONTROL 1 LEAF – BUD EMERGENCE BBCH: 00 – 40

Clethodim Group 1

- Grassy annual weed control (Wild oats, Volunteer barley, Volunteer wheat)
- Ideal tank-mix partner with Liberty® for LL Canola
- Ground application only



ARROW® 240 EC

Clethodim Group 1

- Grassy annual weed control (Wild oats, volunteer barley, volunteer wheat)
- Ideal tank-mix partner with Liberty for glufosinate resistant Canola
- Surfactant comes pre-mixed: simplifies spraying; convenient; saves time
- Ground application only



ARROW ALL IN®

Quizalofop-P-ethyl Group 1

- Controls hard to kill winter annual and perennial grasses (Japanese or Downy brome, Foxtail barley, Quack grass)
- Can be applied by ground or air



LEOPARD®

DESSICANT BBCH: 88 – 90

Diquat Group 22

- Rapid drydown of plants and weeds when compared to systemic herbicides to provide more precise harvest timing, protecting yield and grade
- Harvest can typically begin within 4–10 days after application
- Best results when applied under cloudy conditions or in the evening
- Ground and air application



ARMORY® 240

NEW

FUNGICIDE

SORATEL™

Advanced disease protection powered by Asorbital™ Formulation Technology. Offering a flexible application window, SORATEL™ is proven to protect a wide variety of crops from disease, including sclerotinia in canola.



POWERED BY

Asorbital™

FORMULATION TECHNOLOGY

ACTIVE INGREDIENT:

Prothioconazole 250 g/L EC

FUNGICIDE GROUP:

Group 3

APPLICATION RATES AND ACRES TREATED:

- Rate: 160 – 320 ml/ac; standard rate: 240 ml/ac
- Acres Treated: 60 – 120 ac/case; standard rate: 80 ac/case

PACKAGING:

- Case: 2 x 9.6 L jugs

REGISTERED CROPS:

- | | | |
|---------------------|--------------------|----------------------------------|
| • Barley | • Crambe | • Rapeseed |
| • Borage | • Corn | • Soybean |
| • Brassica carinata | • Flax (Linseed) | • Wheat (spring, durum & winter) |
| • Canola | • Oats | |
| • Chickpeas | • Oriental mustard | |

HOW IT WORKS:

SORATEL™ is a triazolinthione broad-spectrum systemic fungicide with Asorbital™ Formulation Technology. Asorbital™ Formulation Technology enhances penetration and includes a built-in-adjuvant.

KEY DISEASE CONTROLLED IN CANOLA:

Sclerotinia stem rot

WATER VOLUME:

- Ground: Minimum 40 L/ac (10 US gal/ac)
- Air: Minimum 20 L/ac (5 US gal/ac)

REGISTERED AND SUPPORTED TANK MIXES:

Insecticides:

- Coragen®
- Decis®
- SILENCER® 120 EC

MIXING INSTRUCTIONS:

1. Add one-half of the required amount of water to the spray or mixing tank and start agitation.
2. Add the required quantity of SORATEL™ to the water and complete filling with water to the required total volume.
3. Maintain agitation throughout mixing and spraying.

CROP ROTATIONS:

Treated areas may be replanted with any crop specified on the label as soon as practical after the last application. For crops not listed on the label, do not plant back within 30 days of last application.

PRE-HARVEST INTERVAL:

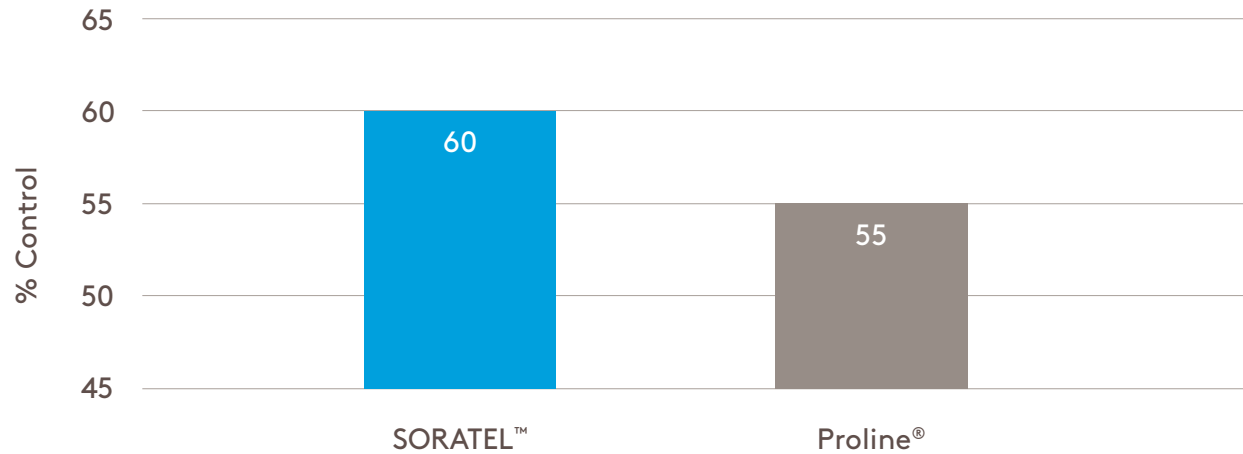
36 days

STORAGE:

To prevent contamination, store this product away from food and feed. Protect from freezing.

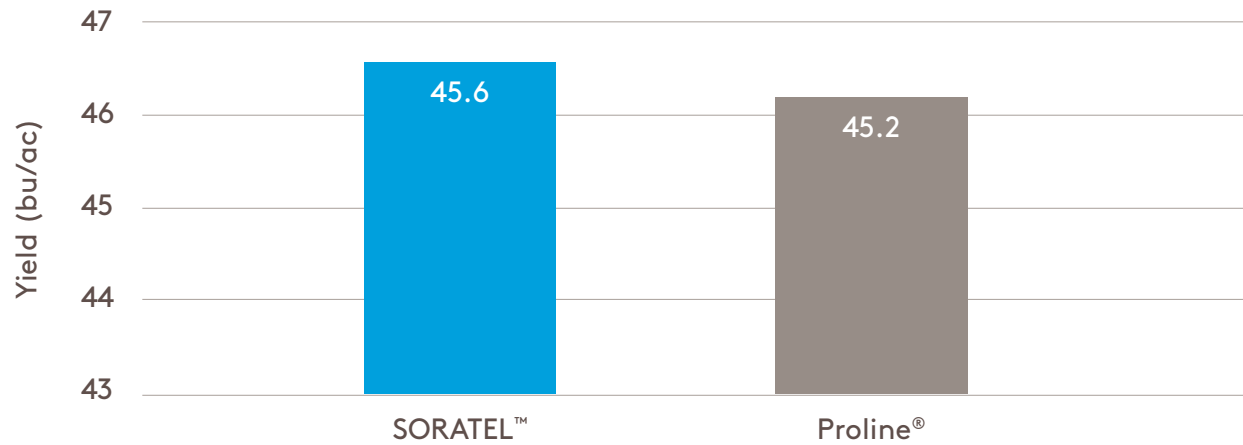
SCLEROTINIA CONTROL IN CANOLA

Summary of 6 small plot replicated trials conducted by independent researchers in Western Canada.



SORATEL™ IN CANOLA YIELDS

Summary of 7 farmer applied trials conducted in Western Canada in 2020.



NEW

 HERBICIDES

EMPHASIS™

Delivers multiple modes of action and fast burn down control of broadleaf (including Group 2, 4, 5 and 9 resistant biotypes) and grassy weeds (when mixed with glyphosate).



ACTIVE INGREDIENTS:

Carfentrazone-ethyl 240 g/L and Bromoxynil 240 g/L

HERBICIDE GROUPS:

Group 14 & 6

APPLICATION RATES AND ACRES TREATED:

- Rate: 15 – 30 ml/ac EMPHASIS™ A + 236 ml/ac BROMOTRIL® 240 EC
- Acres Treated: 80 acres treated per case at the low rate of EMPHASIS™

PACKAGING:

- Co-pack: 2 x 0.6 L EMPHASIS™ A + 2 x 9.7 L BROMOTRIL® 240 EC

REGISTERED CROPS:

- Pre-seed burndown in wheat, barley, oats and canola. EMPHASIS™ and BROMOTRIL® 240 EC are non-residual contact herbicides. Application prior to seeding provides comprehensive broadleaf weed control and excellent crop flexibility.

HOW IT WORKS:

EMPHASIS™ and BROMOTRIL® 240 EC are contact herbicides which control broadleaf weeds including Group 2 and 9 resistant biotypes such as kochia. Within a few hours following application, the foliage of susceptible weeds shows signs of desiccation, and in subsequent days, necrosis and death of the plant occur.

WEEDS CONTROLLED:

When used as directed, the EMPHASIS™ co-pack will provide control of the listed weeds. See the individual labels of each tank-mix partner for specific rates and weed staging and always follow the directions for use of the most stringent label. Good spray coverage is essential for optimal weed control.

WATER VOLUME:

- Ground: 40 L/ac (10 US gal/ac)
- Do not apply by air.

RAIN FASTNESS:

6 hours

Weeds controlled by EMPHASIS™ alone				EMPHASIS™ A Rate	BROMOTRIL® Rate
PRE-PLANT SCENARIO: CANOLA CROPPING SYSTEMS					
80 ac/case				15 ml/ac	236 ml/ac
Black nightshade (up to 5 cm) Eastern black nightshade (up to 5 cm) Lamb's quarters (up to 7.5 cm) Morning glory (up to 3 leaves) Redroot pigweed Tall waterhemp (up to 5 cm) Velvetleaf Volunteer canola					
Weeds controlled when tank mixed with glyphosate plus weeds listed above by glyphosate rate*					
Cocklebur Cowcockle Green foxtail	Green smartweed Lady's thumb Smooth pigweed	Volunteer barley Volunteer wheat	Wild mustard Wild oats	180 g a.i./ac	
180 g a.i./ac weeds + Common ragweed Wild buckwheat Canada fleabane Cleavers	Downy brome Flixweed Giant foxtail Hempnettle	Narrow-leaved hawk's beard Persian darnel	Russian thistle Stinkweed Volunteer flax	277 g a.i./ac	
277 g a.i./ac weeds + Annual bluegrass Annual sow thistle Crabgrass	Kochia Narrow-leaved vetch	Prickly lettuce Shepherd's purse		327 g a.i./ac	
327 g a.i./ac weeds + Canada thistle (rosette stage, summerfallow) Dandelion (less than 15 cm) Quack grass (light to moderate infestations, 3–4 green leaves or more)				360 g a.i./ac	

*See glyphosate label for complete list of weeds controlled at each rate as the EMPHASIS™ + glyphosate combination controls ~70 weeds, not all are listed here

INSECTICIDE

SILENCER® 120 EC

SILENCER® 120 EC is a fast-acting stomach and contact insecticide.



ACTIVE INGREDIENT:

Lambda-cyhalothrin 120 g/L = EC

INSECTICIDE GROUP:

Group 3

APPLICATION RATES AND ACRES TREATED:

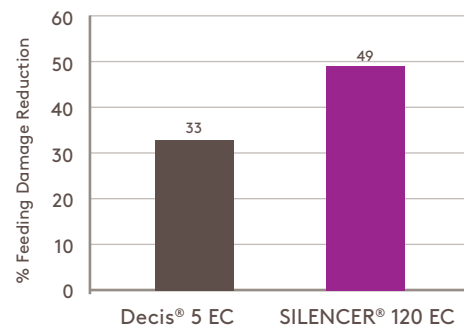
- Rate: 17 – 51 ml/ac; standard rate: 33 ml/ac
- Acres Treated: 74 – 220 ac/jug; standard rate: 113 ac/jug
- Standard rate is applicable for most pests, refer to label for more information.

PACKAGING:

- Case: 4 x 3.785 L jug/case

SILENCER® 120 EC VS DECIS® 5 EC IN CANOLA:

Average Control in 10 trials in 2019
(50% average feeding damage in UTC)



Decis® 5 EC

SILENCER® 120 EC

- It's important to protect the canola plant in the early stages as this is when the most significant flea beetle damage will occur.
- Canola seedlings can withstand almost 50% of leaf loss, however after 25% plant stand and yield can be drastically reduced.
- SILENCER® with the active ingredient lambda-cyhalothrin is one of the best options for control.

APPLICATION RATES:

Crops	Canola and Mustard		
Pest	Crucifer flea beetle, Lygus bug, Cabbage seedpod weevil (adults, Imported cabbageworm, Diamondback moth larvae, Cabbage looper, Bertha armyworm)		
Rate	34 ml/ac	25 – 34 ml/ac	34 ml/ac
Application Method	Ground or aerial	Ground	Aerial
Application Timing	<p>Apply when the insects are at a vulnerable stage (early larval instars). Consult provincial guidelines and local extension experts for treatment threshold and advice.</p> <p><i>For Cabbage Seedpod Weevil (adults):</i> Apply at the bud to early flowering stage of crop development. Timing of applications should also be based on the presence of significant populations of adults, as determined by local monitoring. Application prior to adult migration into the field will not be effective. SILENCER® 120 EC will not control larvae developing within the pod, and must be applied prior to egg laying.</p>		
		<p>Apply the low rate when grasshoppers are up to the 3rd nymphal stage (up to 1 cm in length) or when insect numbers are low. Apply the high rate when grasshoppers are larger, up to but not including winged adults (up to 2.5 cm in length) or when insect numbers are high. If insect pressure is high apply a spray to a 15 m strip around the field. Avoid environmentally sensitive areas and unregistered crops.</p>	

NOTES: To prevent migration of overwintering flea beetle adults throughout the field, ground-spray a 15 m strip around the field at the first sign of flea beetle feeding. **DO NOT** apply within 7 days of harvest.

INSECTICIDE

SOMBRERO® 600 FS

This seed treatment gives you long-lasting, early season control of tough insect pests – including wireworms and flea beetles – in cereals, oilseeds, soybeans and corn.



ACTIVE INGREDIENT:

Imidacloprid 600 g/L = SC

INSECTICIDE GROUP:

Group 4

APPLICATION RATES AND ACRES TREATED:

- Rate: Please refer to the label for application rates or the table below as these vary based on seed type.
- Acres Treated: Varies

PACKAGING:

- Case: 8 x 1.54 L jugs

KEY INSECTS CONTROLLED:

- Wireworms
- Flea beetle

HOW IT WORKS:

How it Works: SOMBRERO® 600 FS contains a proven, highly effective seed treatment insecticide that gives you broad-spectrum control of above and below ground pests. Once treated seed is planted, the active ingredient in SOMBRERO® 600 FS is released and forms a protective barrier around the seed. As the plant grows, systemic action transports SOMBRERO® 600 FS throughout the developing stem and leaves, ensuring lasting insect control and giving the crop the defense to grow to its potential.

APPLICATION RATES:

Insect	Rate
Flea beetle	667 – 1333 ml per 100 kg seeds
Wireworms	17 – 50 ml/100 kg seeds

MIXING INSTRUCTIONS:

Application Rate	Component		Total Mixture
	SOMBRERO® 600 FS	Water*	
667 ml/100 kg seed	670 ml	67 ml	737ml
1333 ml/100 kg seed	1330 ml	133 ml	1463 ml
* See Triple Rinsing Instructions			

NOTE: A colourant **MUST** be added in accordance with the PCP Act and the Seeds Act Regulations. A blue colourant must be added when this product is applied to oilseed.

STORAGE:

- Do not store SOMBRERO® 600 FS at low temperatures.
- Prior to and during application, SOMBRERO® 600 FS must be thoroughly agitated to ensure uniform mixing of the product.
- Due to viscosity of the material, it should be kept at 10° C prior to and during application. Do not apply direct heat to container.

QUICK TIPS:

For optimal insect control, make sure to get good coverage. For resistance management, rotate SOMBRERO® 600 FS with different groups that control the same pests in a field.

 FUNGICIDE

BUMPER[®] 432 EC

BUMPER[®] 432 EC will control blackleg and enhance yield potential during the early stages of canola growth. The disease may reappear later in the season, but with minimal effect on yield.



ACTIVE INGREDIENT:

Propiconazole 432 g/L = EC

FUNGICIDE GROUP:

Group 3

APPLICATION TIMING:

Rosette stage, between 2nd true leaf and bolting

APPLICATION RATES AND ACRES TREATED:

- Rate: 120 ml/ac
- Acres Treated: 40 ac/jug

PACKAGING:

- Case: 2 x 4.8 L jugs

KEY DISEASES CONTROLLED IN CANOLA:

- Blackleg

HOW IT WORKS:

Broad-spectrum, systemic activity with excellent leaf surface protection and translocation within the plant for additional disease prevention.

WATER VOLUME:

- Ground: Minimum 80 L/ac (20 US gal/ac)
- Aerial: 16–20 L/ac (4–5 US gal/ac)

CROP ROTATIONS:

No restrictions.

PRE-HARVEST INTERVALS:

60 days

GRAZING RESTRICTIONS:

Do not graze livestock within 3 days of spraying.

STORAGE:

No temperature restrictions.

WHY IS ADAMA DIFFERENT?

We are all in this business because we love agriculture...the business of 'growing'... the passion of feeding our communities, our country, and the world. **It's that simple.**

But getting to that end result, especially in this last decade, has unfortunately become anything but simple.

At ADAMA, we think it's time for a change. And our driving philosophy—**Listen > Learn > Deliver**—was developed with that change in mind.

We **LISTEN** to the retailers and distributors, the growers, our employees, and the agronomic scientists who are continually working to ensure our industry is the most profitable, agronomically sound and sustainable that it can be.

From those same people, we **LEARN** what they need from crop protection companies, and from ADAMA specifically, to help them achieve and exceed those goals.

What we have learned is:

- The myriad of products available is overwhelming.
- Getting supply and delivery of products on time and correctly can be a challenge.
- Complicated grower programs take precious time away from dealing with what matters most.

Basically, what could be simple, is not anymore.

So, with that in mind, ADAMA has a desire to be different! We hire people who truly embody our philosophy, not only to listen, and learn but to develop and **DELIVER**:

- 270+ available actives that allow growers to deal with fewer chemical companies, reducing the complexity of the retail order
- The ability to fast track tank-mix solutions for key pests as we don't need to work with other companies
- The ability for growers to target a myriad of key pests with ADAMA products alone
- No grower programs...just great products and a great price with great service.

In short, products, solutions and services that help us all to focus on what we collectively are and have always been passionate about.



Listen ▶ Learn ▶ Deliver



It can be that simple.



Listen › Learn › Deliver

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