



HARVEST GUIDE

Organic Soybeans

Reminder

Dear Growers,

Another crop season is upon us and we would like to remind you of a few steps to take to achieve maximum yield and crop quality.

Pre-harvest

- It is most important to inspect your soybean lots and identify weed patches. **A strong infestation of lamb's-quarters or ragweed can stain your crop and downgrade it, particularly during rainy years.** If so, we recommend to wait until frost so that the weed patches can dry up. We also recommend that you harvest these areas last.
- **Caution:** Some nightshade plants may stain the grain and downgrade the crop. It is important to isolate nightshade-infested areas and harvest them last.

Harvest

- Carefully clean the combine (hopper, auger, etc.), transport material and storage silos between each soybean variety to maintain crop purity.
- If the combine has been used to harvest azuki beans, wheat, barley, oat or any other cereal, the grower **MUST** clean the combine carefully with water or air pressure before harvesting soybeans.
- During threshing, a 2 MT quantity must be set aside to avoid contaminating the rest of the lot.
- If there is significant contamination of the soybeans with other grains such as wheat, barley, oats, other cereals or azuki beans, the producer **must** store his soybeans on the farm and wait for the results of the sample submitted before being able to deliver his soybeans to Ceresco.
- Remember that the best moisture conditions for harvesting soybean are 14% and higher; there will be fewer cracked beans and particularly less seed shedding on the thresher table.

General Recommendations

- If some pods are still not harvested, tighten the concave rather than speeding up the beater drum.
- If there are too many broken grains, adjust the concave to obtain an optimal opening (not too wide nor too small), and / or slow down the beater drum if possible.
- Always maintain proper speed to allow regular feeding of the combine (between 5 & 8 km/h, depending on the width of the table, is a good speed to obtain good quality grain).
- Remember that soybeans do not tolerate too much handling; therefore, they must be threshed as soon as they enter the combine, cleaned quickly and transferred to the hopper as soon as possible.
- When unloading soybeans, combine augers must be set at a reasonable speed (1500-1800 revolutions/minute) **while feeding at maximum capacity**.
- Harvest weed patches between noon and 5 p.m. **on a sunny day**.
- In the morning, avoid starting with field borders; wait until afternoon when there is no moisture.
- When there is soil on the pods, wait until the crop is well dried to avoid staining the soybeans.
- Regularly clean elevators, the entrance to the conveyor and the stoner security because this is where soil is most likely to accumulate and stain the soybeans.
- Adjust the head on the combine accurately; if the tilt is too far forward, it will pick up soil. Refer to the instructions manual to adjust the head.
- Change worn fingers and knives for an appropriate cut and less table loss; otherwise, the crop will be torn or laid and the presence of dirt could stain your beans.
- Remember that it is easier to obtain a good quality crop if you harvest soybeans in September or early October. In general, after October 10, harvest days are shorter because of climatic conditions. More soil is stuck on beans closest to the ground because of frequent rain in October, which may cause more stains on the soybeans. Also remember that after October 15, soybean moisture levels in fields can be very difficult to lower due to moist climatic conditions.

Table 1

Here are a few tips to set different types of combines / soybean

Makes	CASE /Inter Axial-Flow	John Deere Conventionnel	John Deere Axial	New Holland Double Axial	Caterpillar Lexon
Approx. Beater Drum Speed	400-500 rpm	400-450 rpm	350-400 rpm	Approx. 550-600 rpm	Approx. 200-300 rpm
Beater Drum Opening	IP 1-3	IP 1-3	IP 4-5	IP 1-3	IP 15-25mm
	When the beater drum is at 0, there must be a 1/4 inch opening between the beater drum and the concave.				
Air Flow Adjustment	1000 - 1200 turns / minute				
Equipment	Keep the same equipment for corn/grain (concave, upper and lower screens)				Standard Equipment

* For other conventional combine makes, use the JOHN DEERE settings.

CATERPILLAR LEXON COMBINE:

Remove the plate marked "Intensive Threshing Segment" in the catalogue at the Threshing System page. Push the trap at front right near conveyor so that harvest is done on the 2nd beater drum.

N.B.: These suggestions are based on past years of experience. However, settings may differ for this year's crop under different conditions. For example, reduce the rotation speed of the rotor if soybean moisture is below 10-12%.

Storage

Silo must be very clean, no water leak.

Use a clean auger in good condition. 8 to 12" is preferable.

When unloading the soybean in the silo, run PTO at a reasonable speed (450 to 540 rpm) while feeding it at maximum.

Take a representative sample (1 handful every 5 minutes) while unloading.

Total sample is to go to Ceresco's representative for testing.

Do not fill the silo to the top. You need to leave a space between the grain and the top of the silo.

Once the unloading is finished, it is recommended to take out about a truck load and put it back on the top to remove the impurities that have accumulated at the center.

Level the grain at the top once done for more efficient and optimal ventilation.

Check your silo at least 1x/month and after heavy rain or snow storms. Remove the snow or wet soybeans every time. Pay particular attention to the smell and temperature of the grain.

Ventilation

Be careful how you ventilate. Take into account outside temperature and moisture as well as grain temperature.

Consult **chart 2** for assistance.

- After harvest, ventilate enough to lower grain temperature.
- During storage, ventilate regularly (+/- 2 weeks) especially on dry days with temperature as close as possible to grain temperature.

You will notice that during the night, relative humidity levels rise and temperatures drop, while soybean relative humidity levels rise. Therefore it is very important to stop ventilating at night so as the soybean humidity levels that drop during the day do not rise again. Visit www.meteomedia.com to find all the information you need.

Table 2

Equilibrium moisture content (% wet basis) for soybeans exposed to air based on the temperature and relative humidity level¹

RELATIVE HUMIDITY (%)					
Temperature	50	60	70	80	90
0°C (32°F)	9,5	11,5	14,4	19,2	29,0
5°C (41°F)	9,3	11,3	14,2	18,9	28,6
10°C (50°F)	9,1	11,1	14,0	18,6	28,2
15°C (59°F)	9,0	10,9	13,7	18,3	27,8
20°C (68°F)	8,8	10,7	13,5	18,0	27,4
25°C (77°F)	8,6	10,5	13,3	17,7	27,0

How to read the above chart: If the relative humidity level is 70% and the temperature is 15°C, your soybean crop will stabilize over time at 13,7 % moisture level.

1. The amount of water vapor present in air expressed as a percentage of the amount needed for saturation at the same temperature.

TIPS FOR SILO VENTILATION

- Ventilate silos if combines are harvesting.
- If not harvesting, stop ventilating silos.

Delivery

Reception schedule

During harvest, check our website www.sgceresco.com, **GRAIN RECEPTION** tab or listen to the message on the voice mail.

We try to offer the most advantageous receiving hours during the harvest period.

Otherwise, deliveries are from Monday to Friday, 7 am to 3:30 pm.

ALWAYS COMMUNICATE WITH THE OPERATION TEAM BEFORE MAKING A DELIVERY.

450 427-3831 ext. 206 reception@sgceresco.com

The operation team will schedule the deliveries with you. You will need an order number for each load being delivered (1 number per delivered load).

Please inform them of any peculiarity on the load (high moisture, high waste, corn contamination...).

Please advise the operation team accordingly, if you wish that payment be made to PGQ or AgriCorp.

If you cannot deliver as scheduled you will need to contact the operation team to make further arrangements.

You must inspect the truck carefully before loading. The truck has to be clean. Do not hesitate to open the trap doors and check the back skirt.

If the truck is not clean it is mandatory that you ask the driver to clean it before loading anything.

Important

Upon delivery, the carrier will have to sign a record of delivery confirming that the box of the truck has been cleaned before loading to ensure that there can be no contamination of the soybean by another product.

At Any Time

- It is preferable that a Ceresco representative be on-site when harvesting to ensure maximum soybean quality.
- Do not hesitate to contact your representative the day before harvesting or for any technical information or questions.

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