RESEARCH REPORT

POTTING FELT

by Green Salon Collective

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Green Salon Collective is always exploring new and improved circular solutions for all salon waste streams.

We've thought for a long time that hair in our house plants was a good thing. We talked a lot about it on social media and people loved learning about it. But we are a brand that believes it is important to back up our claims and so we investigated this first hand. The question we set out to answer was:

Does hair help potted plants to grow better?

We were pretty sure it does but we'll be the first to admit how genuinely surprised we were to see such massive differences between plants with and without hair. **Spoiler alert: hair is good!** To learn exactly how we set up this experiment–and how you can set up your own–we wrote a handy blog article which can be found here.

Now onto the results! (and photos!)

The bottom line is that the potted plants with hair grew better than those with no hair. Plants with hair at both the top and bottom did the very best in terms of new leaves and growth. They grew **27% bigger** and **107% more leaves** than the average plant. In fact, compared to plants with no hair, they grew **87% bigger** and **350% more leaves**.

> "The bottom line is that the potted plants with hair grew better than those with no hair."

Below you can see the final data set (Table 1) and on the next page you can find an overview (Figure 1) as well as a comparison of two plants (Figure 2)

Table 1. Net growth (mm) and new leaves after 308 days, 1.4L water

Presence and position of hair in pot	Plant	Growth (mm)	New leaves
Top and bottom	A	21	6
	B	29	2
	I	32	6
	J	27	0
Top only	K	23	-1
	L	21	2
	C	12	2
	D	17	3
Bottom only	E	33	0
	F	13	2
	M	34	5
	N	20	0
None	O	14	3
	P	11	3
	G	16	-1
	H	19	-5

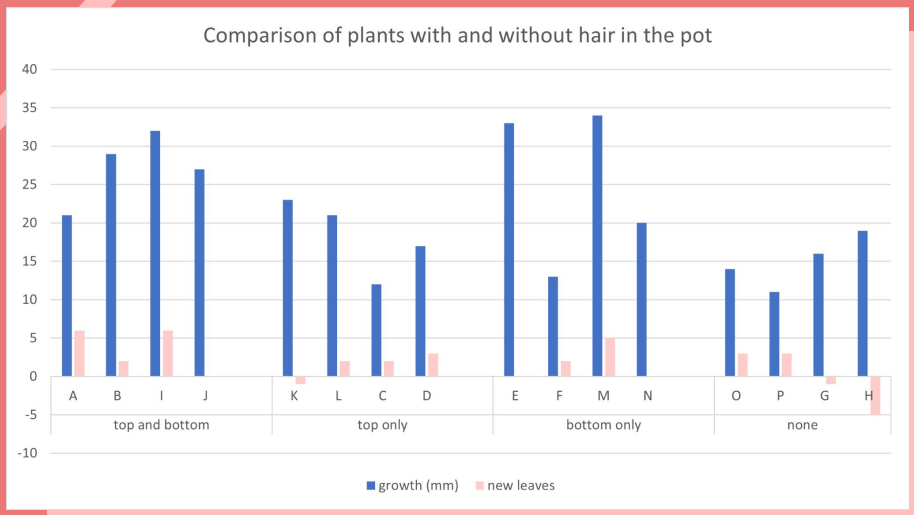


Figure 1. Comparison of net growth (mm) and new leaves of plants with hair at the top and bottom of the pot, top only, bottom only and no hair

Plant A (hair at top and bottom)

Plant H (no hair)

Figure 2. Comparison of plants A and H

Figure 3 below shows the net number of additional leaves after 308 days. Net means that we are only comparing the total number of leaves at the start with the end of the experiment and does not reflect the number of new and dead leaves along the way. For example, for the plants with no hair, we saw many new leaves but an equal number of those died in the same time period.

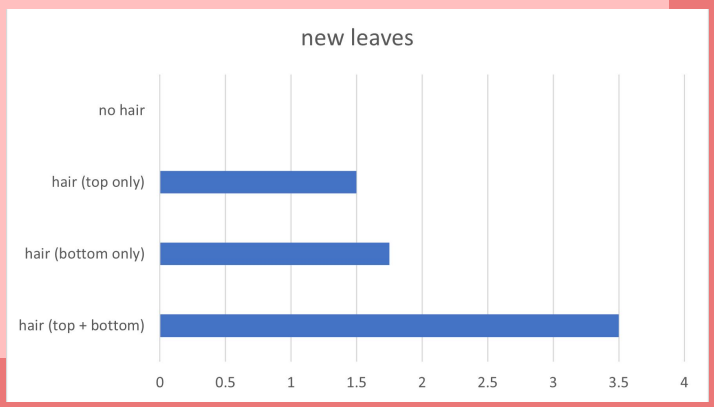


Figure 3. Net new leaves after 308 days, 1.4L water

Figure 4 shows net growth after 308 days. We observed some periods of fast growth and other periods with little growth. Overall, however, the plants with hair at the top and bottom grew larger than those with less or no hair in the same period of time and given the same amount of water.

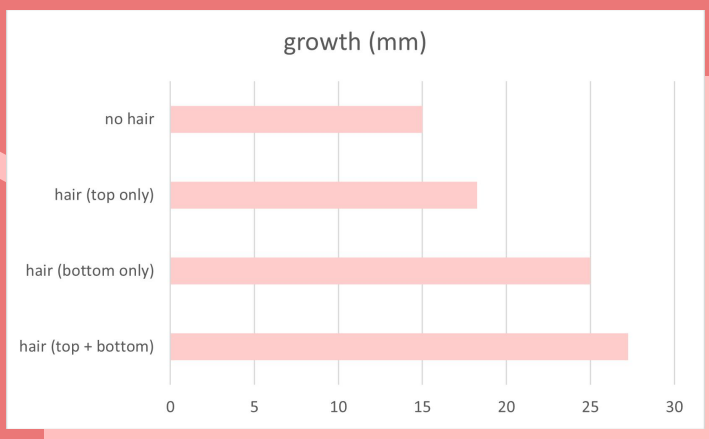


Figure 4. Net growth after 308 days, 1.4L water

Figures 5 and 6 show how each plant type compares to the average. You can see how plants with hair at the top and bottom do almost equally as well as those without hair do poorly.

Plants with hair only at the top or bottom seem to perform only slightly better or worse than the average. The only exception is that plants with hair at the bottom almost always performed better than those with hair at the top all through the experiment. We believe this may be because the hair was useful for keeping water longer where it could be soaked up by the roots. This theory was supported by an interesting observation...

Figure 5. Comparison of new leaves per group vs the average after 308 days, 1.4L water

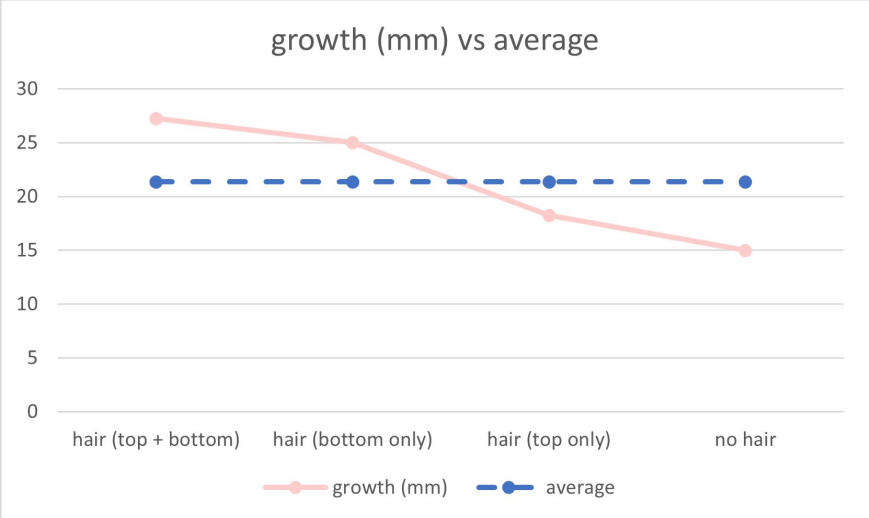


Figure 6. Comparison of growth per group vs the average after 308 days, 1.4L water

When watering the plants on Day 73, we noticed that plant pots without hair at the bottom (i.e. plants with no hair or hair at the top only) were more likely to spill over directly after watering (see photo below). This trend continued throughout the entire rest of the experiment and we believe it is because the hair helped to absorb some of the water. This would be a welcome finding for those of us who find watering plants to be a chore on a busy day.

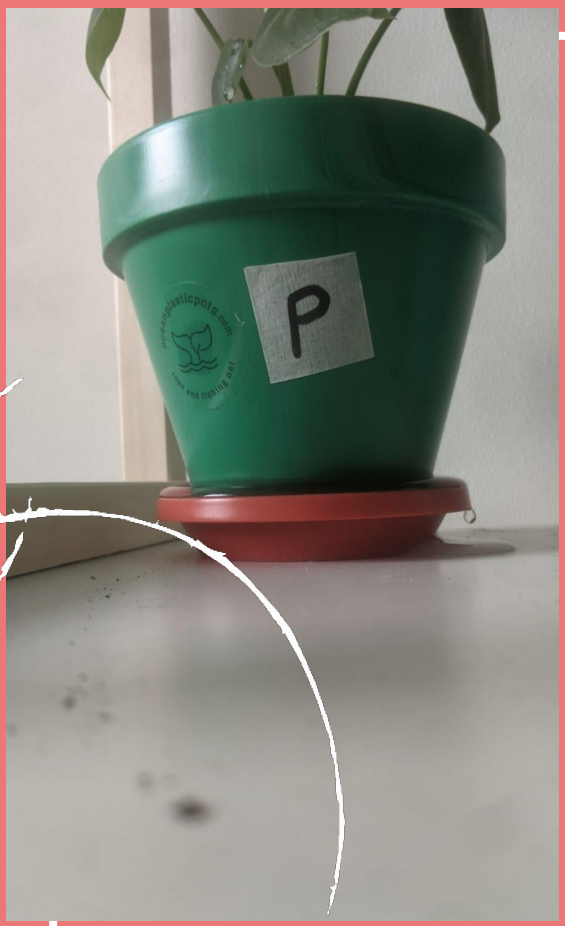


Figure 7. Close up of Plant P with water over spill

The first potted plant to appear poorly was O (see next page), one without hair, at 94 days. On day 114, bugs appeared. We decided to not treat the plants so we could see whether the presence or absence of hair had an effect on plant health after an infestation. First sightings were on plants G, H and O, all plants without hair.

“The numbers don’t lie. The plants with hair at the top and bottom grew wider and more leaves than those with less or no hair.”

Figure 8. Close up of poorly leaves on Plant O

After 308 days, the plant with the most growth in terms of width of the largest leaf was M (hair at the bottom only), followed by E (hair at the bottom only) and I (hair at the top and bottom). The least growth by width was P (no hair), followed by C (hair at the top only) and O (no hair).

The plants with the most new leaves after 308 days were A and I (both with hair at the top and bottom) followed by M (hair at the bottom only. The plants with the fewest new leaves were H (no hair), followed by G and K (no hair and hair at the top only, respectively). You can see these figures in Table 1 (see page 3).

The numbers don’t lie

Overall, the plants with hair at the top and bottom grew wider and more leaves than those with less or no hair. Not only that, the plants with no or less hair appeared much more poorly than those with hair at the top and bottom.

Though there was some variation within the different groups of plants, the averages reveal that the presence or absence of hair directly influenced growth. Moreover, the differences in some instances were significant, especially for plants with hair at the top and bottom compared with no hair.

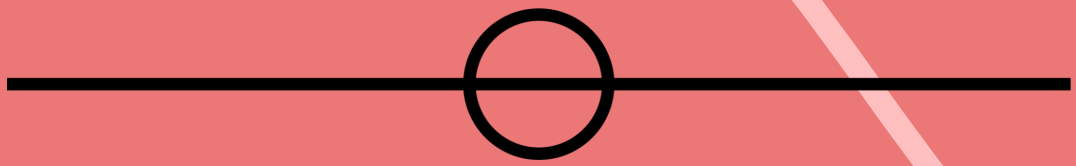
Figure 9. 112 photos of 16 plants over 7 data collection sessions

Our monstera plants really went through the wringer. We kept a watering schedule that was probably less than sufficient to encourage rapid growth of these types of plants. It would be interesting to see how the presence of hair influences these plants with more water and better care. Also it would be interesting to see whether we could achieve the same results with different types of plants, particularly ones that are not as nitrogen-loving.

Moral of the story: **Hair is good**.

(Also, Science is great.)

Special thanks to **Ocean Plastic Pots** for supporting this experiment with a donation of eight pots. Special thanks also to **Stephanie Hodgson**, our Head Nerd, for carrying out the experiment and documenting it all for the world to see!



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