

HAVE YOU EATEN THIS PLANT BEFORE?



PHOTO FROM: LAMIOT (2002), WIKIMEDIA COMMONS. LICENSED UNDER CC BY 3.0. CHANGES MAY HAVE BEEN MADE.

 *swipe to find out*

YOU VERY LIKELY HAVE!

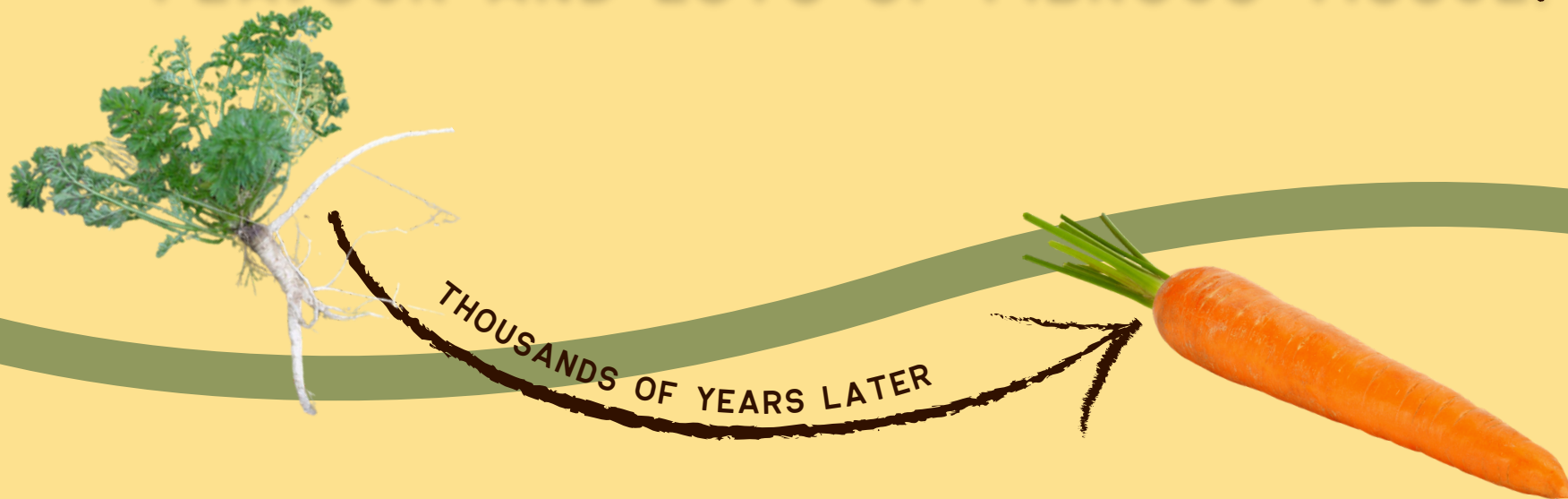


 *swipe to learn more*

CARROT

MADE BY NATURE - GUIDED BY US

HIS WAS THE REALITY OF THE WILD ANCESTOR OF THE CARROT THOUSANDS OF YEARS AGO: TINY, TOUGH, PALE ROOTS WITH A STRONG, EARTHY FLAVOUR AND LOTS OF FIBROUS TISSUE.



THROUGH DOMESTICATION AND GENERATIONS OF CAREFUL SELECTION, HUMANS TRANSFORMED THIS WILD PLANT INTO THE CARROT WE KNOW TODAY: LARGE, SWEET, CRUNCHY, ORANGE ROOTS, READY FOR US TO ENJOY.

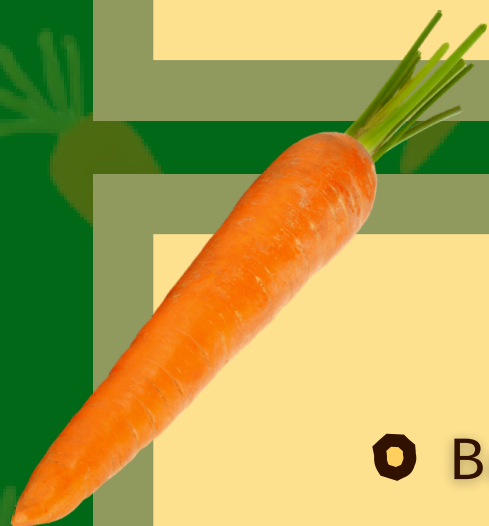
OLD TRAITS

- Very thin, woody roots
- White or pale root color
- Strong, earthy flavor (high terpene content)
 - Tough, fibrous texture
- Small, branched, uneven roots
- Low yield, roots hard to harvest
- High variability in shape & aroma





NEW TRAITS

- Large, thick roots with uniform shape
- Bright colors (orange + purple, yellow, red types)
- Sweet, mild flavor (lower terpene bitterness)
 - Smooth, tender texture
- High yields and stronger root mass
 - Storage-friendly, crisp for weeks
- Specialty types: baby carrots, snack-size,.....



WHY WE CAN'T STOP HERE!



MODERN BREEDING IS STILL NEEDED TO DEVELOP CARROTS THAT ADDRESS TOMORROW'S NEEDS BECAUSE:

- Heat & drought cause cracking, forking, tip burn, and faded color.
- Pressure from carrot diseases (leaf blight, nematodes, powdery mildew, cavity spot) are increasing.
- Root uniformity still needs improvement for efficient mechanical harvesting.
 - Sweetness, flavor and crunch can be improved.
- Market demand is growing for baby-cut and snack-sized carrots.
- Shelf life still suffers from dehydration, loss of crunch, and storage disorders.

BECAUSE THE CARROTS WE ENJOY TODAY WEREN'T BUILT FOR CURRENT AND FUTURE GROWING CONDITIONS. BREEDING GIVES US CARROTS THAT THRIVE WITH FEWER INPUTS, TOLERATE STRESS, AND REMAIN RELIABLE AS CLIMATES WARM