

SOME LIKE IT HOT.....

Along with other treasures, Christopher Columbus carried seeds from New World *Capsicum* plants back to the Spanish monarchy. Cultivated in Central and South America as far back as 7500 BC, their fiery taste reminded him of *Piper nigrum*, or black pepper. Columbus called the new plants ‘pimento’, or ‘pepper’, and the rest is history. It didn’t take long before they become a valuable commodity, traded throughout Europe, Africa, and Asia. Every cuisine has its signature varieties, and an astounding 3,000 cultivars of *Capsicum* are grown around the world today.



The observation that “you can’t judge a book by its cover” certainly applies to chili peppers. Some look tiny and innocent, maybe no bigger than an olive, but a single bite is all it takes to set your face on fire. That’s because hot peppers contain capsaicinoids, molecules that bring on the burn when they contact pain receptors on the body’s mucous membranes. While they can’t cause an actual chemical burn, they can definitely cause a panic attack.

To determine what’s hot and what’s not, the Scoville Scale was devised in 1912 to measure a pepper’s concentration of capsaicin. The test uses sugar to neutralize the heat; the more sugar added, the higher the Scoville score. Sweet bell peppers come in at 0, while pepperoncins are a bland 900. Poblanos and pasillas score 2,000, topped by jalapenos at 10,000. But that’s nothing. Currently holding the constantly challenged Guinness World Record for hottest pepper, South Carolina’s ‘Carolina Reaper’ scored over 2,000,000, giving police pepper spray a run for its money. Today, scientists use liquid chromatography to measure the exact amount of the capsaicinoids, and convert their readings into Scoville’s old scale.

The heat is in the seeds and the white inner membrane, so removing these parts can make the pepper more palatable. If you bite off more than you can chew, capsaicins are soluble in both alcohol and fat, so a stiff drink, or full-fat dairy (milk and ice cream) could bring relief. Chugging water, beer, or soda will only spread the capsaicins around the inside of your mouth, igniting even more pain receptors and amplifying your misery. If you find you’ve added too much heat to a recipe, try adding a fat like cheese, sour cream, or butter. Or do what Scoville did; add a little sugar, a teaspoon at a time, to neutralize some

of the heat. And remember to wear gloves, and never touch your eyes or other sensitive body parts, while handling hot peppers.

Chilies thrive in the Yakima Valley's hot, dry summers. But because the weather has been so cool this season, my husband has held off planting them. Ideally, the soil has warmed to at least 70 degrees and nighttime temperatures are consistently above 55 degrees. Like other members of the Solanaceae family (tomatoes and eggplants), planting peppers too early can doom them to a season of stunted growth and poor production.

Even though most varieties don't grow especially tall, peppers can become top-heavy with fruit, so stake them to keep them upright or grow them inside a tomato cage. Peppers need all-day sun and fertile, well-drained soil. Willi Galloway recommends feeding every three weeks with a dilute fertilizer and mulching around the base of plants with a 3" layer of straw. Irrigate when the soil dries out down to the base of your second knuckle. If you want your crop of hot peppers to be even hotter, exposing them to drought stress will increase their levels of capsaicinoids, so you can allow the soil to dry out occasionally. Otherwise, keep the soil consistently moist. When temperatures rise above 90, or drop below 60, peppers can drop their flowers, but the plants will rebound when the weather moderates.

Pick the first few peppers right after they form to encourage more pepper production, and harvest mature fruits regularly to keep the plants setting fruit over a long season. I've learned the hard way that pulling peppers from the plant at harvest can snap the brittle branches, so use scissors. Hot peppers that eventually turn red can be picked and eaten when they're still green and not quite so hot, but sweet peppers may taste bitter if picked before they completely ripen.

While peppers are self-fertile, insects may still visit the flowers, resulting in cross-pollination, which can make the next generation of sweet peppers much hotter. If you're a seed-saver, isolate each variety to ensure each pepper is true to type.

Foodies from all over West make a road trip to Wapato's Krueger Pepper Gardens every summer. Founded in 1937, this family farm sells an array of certified organic fruits and vegetables. The big draw is 100 varieties of hot and sweet peppers, including many of the world's hottest. It's a pepperhead's dream come true. Contact them at KruegerPepperGardens@gmail.com.

