the map of maple: off-flavors

mother nature	**sour sap**		ropey appearance citrus, soy sauce, fermented aromas sour taste thick, chunky mouthfeel
	metabolism		chocolaty, grassy aroma lack of maple flavor cardboard, popcorn, peanut butter flavors dry mouthfeel
	buddy		chocolaty aroma and flavors lingering aftertaste
defoamer	**safflower and vegetable oils**		vegetable aroma and flavor oily, waxy mouthfeel
	canola oil		spicy, peppery flavors walnut, pungent finish astringent mouthfeel
processing	**burnt**	**scorch**	burnt flavors (coffee, dark chocolate) thick body
		niter	burnt flavors (coffee, dark chocolate) leathery, spicy meat flavor chalky, gritty mouthfeel
	storage	**fermented**	yeasty alcohol aroma honey, fruity, spicy (soy sauce), vegetable flavors thin body foamy appearance (severe fermentation) effervescent mouthfeel
		metallic	tin can aroma strong metallic flavor (affects back tongue and teeth)
chemicals	**minerals / niter** ◣		fizzy, gritty mouthfeel
	chloride		salty taste
	acid / basic ◣		acid or caustic odor (depending on chemical) pungent, burning sensations
others	**musty / mold** ◣		moldy, yeasty, vegetable aromas and flavors lingering finish (affects back tongue and throat)
	detergents ◣		perfumy, floral aromas soapy flavor
	lubricants / fuels		petroleum aroma and flavor oily mouthfeel astringent finish

◣ **filters** — these defects could stem from misuse or mishandling of syrup filters

tasting maple syrup

The flavor and overall sensory quality of maple syrup can be influenced by multiple factors. Outside the sugarhouse, these include environmental conditions, location, and time in the season; inside the sugarhouse these include method of production, as well as filter and packaging conditions. This sensitivity makes the flavor of maple syrup susceptible to flavors not considered "typical."

This tool is meant to identify off-flavors in syrup, and link the particular sensory experience to a specific defect and category that explains why the defect has occurred. Additionally, this tool serves as a user-friendly representation of the Vermont Agency of Agriculture Farms and Markets (VAAFM) "Maple Syrup Off-Flavors" manual.

The descriptors on the right describe the aroma, taste and/or mouthfeel of the defective syrup (ex. "chocolaty aroma and flavors, lingering aftertaste"), paired on the middle column with the specific cause of defect (ex. "buddy"). The defects are then grouped by type of defect (example: "mother-nature") in order to better identify off-flavors, and to trouble-shoot future batches. The triangle in the lower left corner denotes a defect linked to misuse or mishandling of filters.

sampling your syrup

Smell the syrup before tasting, note any atypical smells. Consult the list of descriptors to match any atypical aromas to their potential causes listed on the left.

Taste the syrup, note of the taste and the mouthfeel. Repeat the process described above.

Evaluate the syrup. If the troubleshooting guide indicates, address any issues with filters or processing equipment.

the taste of Vermont

A team of researchers, sugarmakers and sensory panelists collaborated over several years by evaluating maple syrup from throughout the state of Vermont. The result was two sensory tools to help sugarmakers determine the quality of the maple syrup each season. It was jointly developed by the Nutrition and Food Sciences Department at University of Vermont and the Vermont Agency of Agriculture Food and Markets. State funds for this project were matched with Federal funds under the Federal-State Marketing Improvement Program of the Agricultural Marketing Service, U.S. Depart-

The University of Vermont

VERMONT
AGENCY OF AGRICULTURE, FOODS & MARKETS

Funding for this resource was made possible by the U.S. Department of Agriculture's (USDA) Agricultural Marketing Service through grant AM190100XXXXG033. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the USDA.