

TABLE I. Proposed standards for avocado oil^a

	Extra virgin	Virgin	Pure	Blends
General	Oil extracted from high-quality fruit (minimal levels of rots and physiological disorders). Extraction to be carried out using only mechanical extraction methods including presses, decanters, and screw presses at low temperatures (<50°C). Addition of water and processing aids (e.g., enzymes and talcum powder) is acceptable, but no chemical solvents can be used	Oil extracted from sound fruit with some rots or physiological disorders. Extraction to be carried out using only mechanical extraction methods including presses, decanters, and screw presses at low temperatures (<50°C). Addition of water and processing aids (e.g., enzymes and talcum powder) is acceptable, but no chemical solvents can be used	Fruit quality not important. Decolorized and deodorized oil with low acidity, low color, and bland flavor. Oil produced from good quality virgin avocado oil; may be just avocado oil or infused with natural herb or fruit flavors	Avocado oil is excellent for blending and complements extra virgin olive, flaxseed, macadamia, and pumpkin seed oils. The specification and composition should match what is claimed on the label
Organoleptic characteristics^b				
Odor and taste	Characteristic avocado flavor and sensory assessment shows at least moderate (above 40 on a 100-point scale) levels of grassy and mushroom/butter with some smoky	Characteristic avocado flavor and sensory assessment shows at some (above 20 on a 100-point scale) levels of grassy and mushroom/butter with some smoky	Bland or matches description of infused flavor, e.g., lemon, chili, rosemary, etc.	Dependent on the blend
Defects	Minimal to no defects such as painty and fishy notes below 20 and glue-like below 35 as a sensory panel average on a 100-point scale	Low levels only of defects such as painty and fishy notes below 50 as a sensory panel average on a 100-point scale	Low defects such as painty and fishy notes below 50 as a sensory panel average on a 100-point scale	Low defects such as painty and fishy notes below 50 as a sensory panel average on a 100-point scale
Color	Intense and attractive green	Green with potential yellow hue	Pale yellow	Dependent on the blend
Free fatty acid (% as oleic acid)	≤0.5%	0.8–1.0%	≤0.1%	As specified
Acid value	≤1%	≤2.0%	≤0.2%	
Peroxide value (meq/kg oil)	≤4.0	<8.0	<0.5	
Stability	2 years at ambient temperature when stored under nitrogen and out of the light	18 months at ambient temperature when stored under nitrogen and out of the light	>2 years at ambient temperature when stored under nitrogen and out of light	
Smoke point	≥250°C	≥200°C	≥250°C	
Moisture	≤0.1%	≤0.1%	≤0.1%	
Fatty acid composition % (typical values)				
Palmitic acid (16:0)	10–25			
Palmitoleic acid (16:1)	2–8			
Stearic acid (18:0)	0.1–0.4			
Oleic acid (18:1)	60–80			
Linoleic acid (18:2)	7–20			
Linolenic acid (18:3)	0.2–1			
Antioxidants (mg/kg)				
Vitamin E	70–190			
Trace metals (mg/kg)				
Copper	≤0.05	≤0.05	≤0.05	≤0.05

^aReproduced from Woolf et al., 2009.

^bThese characteristics are measured with a trained sensory panel with a minimum of 15 hours of experience of tasting olive oil.