

Plant Flammability Testing

Max Moritz **UCCE** Wildfire Specialist mmoritz@ucsb.edu

November 18, 2024







Why Do We Care?





Why Do We Care?

Landscape fire patterns & "buffers"



(Moritz et al. 2022)



Experimental Chamber





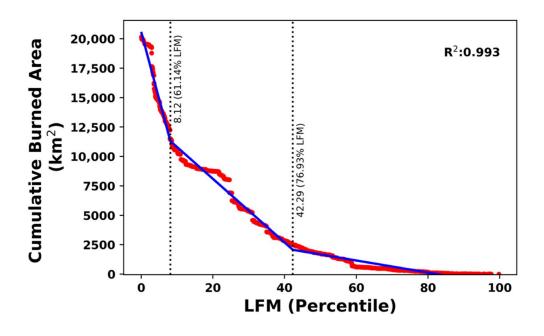


What Gets Measured?

Flammability axis	Flammability metric	Definition
Ignitability	Time to ignition	Time (sec.) from sample placement to first flaming
	Glow to ignition	Time (sec.) from first glow to first flaming
	Temp. at ignition	Temperature (°C) at first flaming
Combustibility	Maximum temp.	Maximum temperature (°C) between ignition and 5s post-flame extinction
	Flame height	Height (cm) of tallest flame
Consumability	Time to first glow	Time (sec.) from sample placement to first glow
	Glow duration	Time (sec.) from first glow to extinguishment of final ember
	Post-flame glow	Time (sec.) from last flame to extinguishment of final ember
Sustainability	Flame duration	Time (sec.) from first flame to last flame

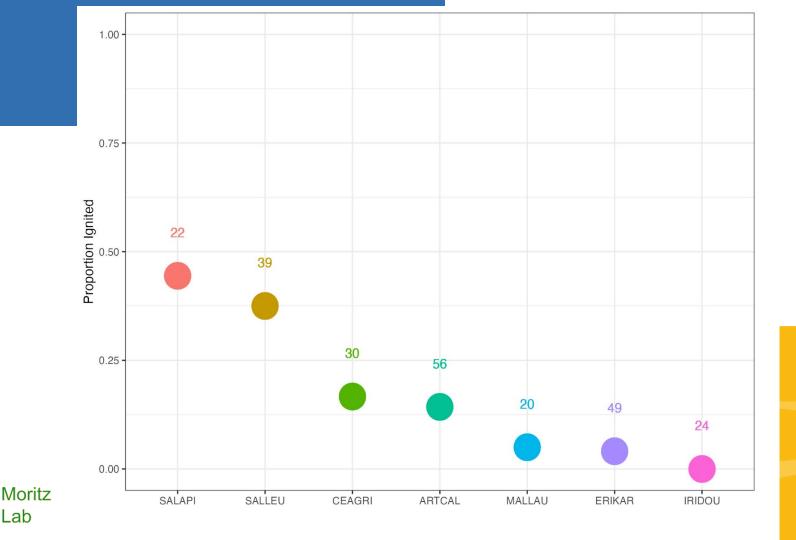


Stakeholder: Land/Fire Managers





(Park et al. 2022)



UCANR Opportunity?

Approach this issue regionally...

- Establish standardized testing methods
- Undertake testing at RECs!

