



Wheat Quality Training
California Wheat Commission
1240 Commerce Ave, Suite A
Woodland, CA 95776

Course Instructors:

Teng Vang, Lab Director
Alejandra Andrade, Lab Manager

General Information:

This course is designed to provide participants with information about Wheat Quality: grain and flour quality, milling, and baking. Participants will learn through lectures, hands-on laboratory testing and baking at the California Wheat Commission's Wheat Laboratory.

Samples analyzed will include: Hard Wheats. We encourage participants to bring their own samples (1-2 grain samples - 5 lbs/each) but requires shipping samples 2-weeks ahead of training session.

Objectives:

- Gain knowledge of wheat quality
- Understand the impact of flour quality in baked products
- Learn to perform and interpret wheat quality testing methods
- Participate in a hands-on training experience

Schedule:

Participants will be training at the California Wheat Commission Quality Lab. This three-day training session will be from 9 AM – 5 PM (one-hour lunch). Most of the course will be hands-on training and participants will be assigned to different working stations. Tentative schedule:

- Day 1: Lecture, Grain Quality and Milling,
- Day 2: Flour Quality, Dough Rheology, Lecture
- Day 3: Product application: Baking, Tortillas Intro

COST: This is a 3 -days training course. The cost for the training session is \$1,500 (Includes coffee and lunch). To register for the training session, please send contact information to info@californiawheat.org.



Program

Phase I - Analysis of Grain Quality

1. Grain Moisture
2. Grain Protein
3. Grain Ash
4. Test Weight
5. Single Kernel Hardness, weight, diameter (SKCS)
6. Falling Number
7. PPO

Phase II – Milling Technology

1. Wheat Tempering
2. Flour Yield & Flour types
3. Flour Particle Size Distribution
4. Starch Damage

Phase III – Flour Analysis & Dough Rheology

1. Wet Gluten & Gluten Index
2. Farinograph
3. Mixograph
4. Alveograph
5. Overview of Solvent Retention Capacity and Sedimentation
6. Solvent Retention Capacity
7. Micro Sedimentation

Phase IV – Product Quality & Evaluation

Bread

1. AACCI Puploaf
2. Dough Preparation
 - a. Mixing
 - b. Fermentation
 - c. Molding and Panning
 - d. Baking
3. Bread Evaluation - Scoring
 - a. Crumb and crust evaluation (color, defects)
 - b. Crumb grain and texture.

Tortillas - Overview