SOIL AND PLANT SCIENCE DIVISION

Technical Soil Services

Southwest Soil Survey Region

Arcata, California MLRA Soil Survey Office (SSO)

Arcata MLRA SSO Assists the 2023 Region 6 Collegiate Soil Judging Competition

Purpose

The 2023 Region 6 Collegiate Soil Judging Competition was held on Green Diamond land in Northern California on Friday, November 10, 2023. Soil judging teams from Cal Poly San Luis Obispo (SLO), UC Davis, California State University–Fresno (CSUF), New Mexico State University (NMSU), and Cal Poly Humboldt competed, with the top three finishing teams advancing to the national soil judging competition in Iowa. The top ten individual scores also received awards. The Southwest Soil Survey Region received the technical soil survey assistance request from Dr. Susan Marshall, professor at Cal Poly Humboldt.

Figure 1.—Two UC Davis students taking samples from Pit 3 to describe soil characteristics.

Figure 2.—Close up photo of the taped off control section in Pit 3.

Background

Mikayla Allan, soil scientist in the Arcata MLRA SSO, and Phil Smith, California Area Resource soil scientist, assisted with site selection, description of site and soil characteristics/interpretations, and helped prepare the competition handbook. Mike Kolman, Genevieve Landucci, Madeline Tome, Peter Zerbe, and Rachel MacDowell provided support on contest day by draining pits, monitoring contestants, and grading scorecards during the competition.

Figure 3. —An excavator digging one of the competition soil pits.

On competition day, over fifty students, coaches, and NRCS staff embarked on a long yet thrilling day of soil judging. Students were tasked with judging three individual pits and one group pit. They had one hour at each pit to denote site and soil characteristics, complete soil classification, and calculate site interpretations such as "Dwellings Without Basements," "Septic Tank Absorption Fields," and "Storie Index Rating Grade." After each hour, scorecards were graded by university coaches and NRCS staff. When all judging was completed, the group judging, top ten individuals, and top three universities were announced. The three highest scoring universities will have the opportunity to compete in the National Soil Judging Competition in Iowa.

Key Outcomes

The Arcata MLRA SSO elevated the knowledge of soils for those in attendance. The event created an opportunity for NRCS staff to provide outreach and recruitment for future employees. The contest was a complete success, with the teams from Cal Poly SLO finishing in first, NMSU in second, and CSUF in third place advancing to the spring national competition in Iowa. The SWSSR and Arcata MLRA SSO are grateful to have an opportunity to support the 2023 Region 6 Collegiate Soil Judging Competition. They look forward to assisting again in the future.

Figure 4.—University students sitting with their soil samples, soil judging handbook, and scorecard.

Figure 5. —Cal Poly SLO students taking soil samples in Pit 1.

Figure 6.—Participants, coaches, and NRCS staff posing at the end of an exciting competition day.

Table 1. Top Ten Individuals

Place	Contestant	School
1	Kylee Nielsen	Cal Poly SLO
2	Nabila Wildman	Cal Poly SLO
3	Ashley Riggs	NMSU
4	Cody Cameron	Cal Poly SLO
5	Ben Stock	Cal Poly Humboldt
6	Nicholas Baham	Cal Poly SLO
7	Juan Magana	CSUF
8	Anna Buecheler	Cal Poly SLO
9	Brynn Pera	Cal Poly SLO
10	Sara Weitzel	UC Davis

Table 2. Top Three Schools

Place	School
1	Cal Ploy SLO
2	NMSU
3	CSUF

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