

Agricultural Pest Control (TOP: 0103.00)

May 2019

Prepared by the South Central Coast Center of Excellence for Labor Market Research



Program Recommendation

This report was compiled by the South Central Coast¹ Center of Excellence to provide regional labor market data for the program recommendation – Agricultural Pest Control. This report can help determine whether there is demand in the local labor market that is not being met by the supply from programs of study (CCC and non-CCC) that align with this occupation group.

Key Findings

- In the South Central Coast region, the number jobs related to Agricultural Pest Control is expected to remain steady over the next five years. Limited growth is projected.
- Pest Control Workers and Pesticide Handlers, Sprayers, and Applicators, Vegetation are at high risk of automation and Agricultural Inspectors are anticipated to experience a low risk of automation.
- In 2017 there were 11 regional completions in programs related to the occupations identified as related to Pest Control and 183 openings.
- Typical entry-level education ranges from a high school diploma or equivalent for Pest Control Workers and Pesticide Handlers, Sprayers, and Applicators, Vegetation, to a Bachelor's degree for Agricultural Inspectors.
- Completers of statewide Agricultural Pest Control programs (TOP 0103.00) from the 2015-2016 academic year had a median annual wage upon completion of \$27,198.
- 64% of students, statewide, are earning a living wage.
- 69% of students, statewide, are employed within a year after completing a program.

¹ The South Central Coast Region consists of San Luis Obispo County, Santa Barbara County, Ventura County, and the following cities from North Los Angeles County: Canyon Country, Castaic, Lake Hughes, Lancaster, Littlerock, Llano, Newhall, Palmdale, Pearblossom, Santa Clarita, Stevenson Ranch, and Valencia.

Occupation Codes and Descriptions

Currently, there are four occupations in the standard occupational classification (SOC) system that are related to Agricultural Pest Control. The occupation titles and descriptions, as well as reported job titles are included in Exhibit 1.

Exhibit 1 – Occupation, description, and sample job titles

SOC Code	Title	Description	Sample of Reported Job Titles
37-2021	Pest Control Workers	Apply or release chemical solutions or toxic gases and set traps to kill or remove pests and vermin that infest buildings and surrounding areas.	Certified Pest Control Technician, Commercial Pest Control Technician, Exterminator, Pest Control Applicator, Pest Control Chemical Technician, Pest Control Operator, Pest Control Technician, Pest Technician, Residential Pest Control Technician, Termite Technician
37-3012	Pesticide Handlers, Sprayers, and Applicators, Vegetation	Mix or apply pesticides, herbicides, fungicides, or insecticides through sprays, dusts, vapors, soil incorporation, or chemical application on trees, shrubs, lawns, or botanical crops. Usually requires specific training and State or Federal certification.	Chemical Applicator, Integrated Pest Management Technician (IPM Technician), Lawn Specialist, Lawn Technician, Licensed Pesticide Applicator, Pest Control Technician, Pesticide Applicator, Spray Applicator, Spray Technician, Tree and Shrub Technician
45-2011	Agricultural Inspectors	Inspect agricultural commodities, processing equipment, and facilities, and fish and logging operations, to ensure compliance with regulations and laws governing health, quality, and safety.	Brand Inspector; Consumer Safety Inspector (CSI); Deputy Brand Inspector; Food Inspector; Food Sanitarian; Grain Inspector; Inspector; Inspector, Food Safety and Inspection Service (Inspector, FSIS); Seed and Fertilizer Specialist; Shipping Point Inspector

Source: O*NET Online

Current and Future Employment

In the South Central Coast region, the number of jobs related to Agricultural Pest Control is expected to remain steady over the next five years. Exhibit 2 contains detailed employment projections data for these occupations.

Exhibit 2 – Five-year projections for Agricultural Pest Control in the South Central Coast region

SOC	Occupation	2018 Jobs	2023 Jobs	2018-2023 Change	2018-2023 % Change
37-2021	Pest Control Workers	776	803	27	3%
37-3012	Pesticide Handlers, Sprayers, and Applicators, Vegetation	264	275	11	4%
45-2011	Agricultural Inspectors	157	164	7	4%

Source: Economic Modeling Specialists International (EMSI)

Earnings

In the South Central Coast region, the average wage for the listed occupations is \$18.93 per hour.

Exhibit 3 contains hourly wages and annual average earnings for this occupation. Entry-level hourly earnings is represented by the 25th percentile of wages, median hourly earnings is represented by the 50th percentile of wages, and experienced hourly earnings is represented by the 75th percentile of wages, demonstrating various levels of employment.

Exhibit 3 – Earnings for Agricultural Pest Control in the South Central Coast region

SOC	Occupation	Entry-Level Hourly Earnings	Median Hourly Earnings	Experienced Hourly Earnings
37-2021	Pest Control Workers	\$15.25	\$19.47	\$23.63
37-3012	Pesticide Handlers, Sprayers, and Applicators, Vegetation	\$16.35	\$17.59	\$20.26
45-2011	Agricultural Inspectors	\$15.65	\$23.19	\$34.60

Source: Economic Modeling Specialists International (EMSI)

Employer Job Postings

In this research brief, real-time labor market information is used to provide a more nuanced view of the current job market, as it captures job advertisements for occupations relevant to the field of study. Employer job postings are consulted to understand who is employing pest control workers, and what they are looking for in potential candidates. To identify job postings related to Agricultural Pest Control, the following standard occupational classifications were used:

37-2021	Pest Control Workers
37-3012	Pesticide Handlers, Sprayers, and Applicators, Vegetation
45-2011	Agricultural Inspectors

Top Occupations

In 2018, there were 130 employer postings for occupations related to Agricultural Pest Control.

Exhibit 4 – Top occupations in job postings and risk of automation tables

SOC Code	Occupation	Job Postings, Full Year 2018
37-2021	Pest Control Workers	118
45-2011	Agricultural Inspectors	9
37-3012	Pesticide Handlers, Sprayers, and Applicators, Vegetation	3

Source: Labor Insight/Jobs (Burning Glass)

SOC Code	Occupation	Risk of Automation
37-2021	Pest Control Workers	High
45-2011	Agricultural Inspectors	Low
37-3012	Pesticide Handlers, Sprayers, and Applicators, Vegetation	High

Source: Labor Insight/Jobs (Burning Glass)

Top Titles

The top job titles for employers posting ads for jobs related to Agricultural Pest Control are listed in Exhibit 5. Pest Control Technician is mentioned as the job title in 44% of all relevant job postings (57 postings).

Exhibit 5 –Job titles

Title	Job Postings, Full Year 2018
Pest Control Technician	57
Pest Control Specialist	14
Field Termite Control Services Technician/Representative	12
Commercial Pest Control Technician	6
Field Tester	5
Pest Control Advisor	5
Technician	4

Source: Labor Insight/Jobs (Burning Glass)

Top Employers

Exhibit 6 lists the major employers hiring professionals in the Agricultural Pest Control field. The top employer posting job ads was ServiceMaster. The top worksite cities in the region for these occupations were Santa Clarita, Santa Maria, Ventura, Palmdale, and Oxnard.

Exhibit 6 – Top employers (n=107)

Employer	Job Postings, Full Year 2018
ServiceMaster	35
Rentokil Initial Plc	10
Ecolab Incorporated	5
Anderson Pest Solutions	4
E&J Gallo Winery	3

Source: Labor Insight/Jobs (Burning Glass)

Skills

Customer Service is the most sought after skill for employers hiring for jobs related to Agricultural Pest Control.

Exhibit 7 –Job skills (n=97)

Skills	Job Postings, Full Year 2018
Customer Service	66
Customer Contact	40
Product Sales	39
Calculation	34
Basic Mathematics	33

Source: Labor Insight/Jobs (Burning Glass)

Industry Concentration

Exhibit 9 shows the industries where most Agricultural Pest Control workers are employed in the South Central Coast region. Note: 16% of records have been excluded because they do not include an industry. As a result, the chart below may not be representative of the full sample.

Exhibit 9 – Industries employing the most Agricultural Pest Control workers, 2018

Industry	Occupation Group Jobs in Industry	% of Occupation Group in Industry
Administrative and Support and Waste Management and Remediation Services	85	78%
Utilities	7	6%
Manufacturing	6	6%
Real Estate and Leasing	3	3%
Educational Services	2	2%

Source: Labor Insight/Jobs (Burning Glass)

Education and Training

Exhibit 10 shows the typical entry-level education requirement for the occupations of interest, along with the typical on-the-job training needed to attain competency in the occupation.

Exhibit 10 – Education and training requirements

SOC	Occupation	Typical entry-level education	Typical on-the-job training
37-2021	Pest Control Workers	High school diploma or equivalent	Moderate-term on-the-job training
37-3012	Pesticide Handlers, Sprayers, and Applicators, Vegetation	High school diploma or equivalent	Moderate-term on-the-job training
45-2011	Agricultural Inspectors	Bachelor's degree	Moderate-term on-the-job training

Source: Bureau of Labor Statistics Employment Projections (Educational Attainment)

Regional Completions and Openings

There were 11 regional completions (2017) and 183 regional openings (2017) in the South Central Coast region in programs related to the occupations identified as related to Agricultural Pest Control.

Exhibit 11 – Completions and Openings

4 Regional Institutions had Related Programs (2017)	11 Regional Completions (2017)	183 Annual Openings (2017)
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Source: Economic Modeling Specialists International (EMSI)

Related Programs

CIP Code	Program	Completions (2017)
01.0605	Landscaping and Groundskeeping	9
01.0606	Plant Nursery Operations Management	2
01.0401	Agricultural and Food Products Processing	0
01.0607	Turf and Turfgrass Management	0

Source: Economic Modeling Specialists International (EMSI)

Student Outcomes

The CTE LaunchBoard provides student outcome data on the effectiveness of CTE programs. The following student outcome information was collected from exiters of the Agricultural Pest Control program (TOP Code: 0103.00) for the 2015-16 academic year. Please note that no local programs were identified so statewide data is being provided.

- The median annual wage for students after exiting is \$27,198
- Starting salary in the state for Farmers, Ranchers, and Other Agricultural Managers is \$44,470
- 64% of students are earning a living wage
- 69% of students are employed within a year after completing a program

Source: CTE LaunchBoard

Sources

O*Net Online, Labor Insight/Jobs (Burning Glass), Economic Modeling Specialists International (EMSI), MIT Living Wage Calculator, Bureau of Labor Statistics (BLS) Education Attainment, California Community Colleges Chancellor's Office Management Information Systems (MIS) Data Mart, CTE LaunchBoard, Statewide CTE Outcomes Survey, Employment Development Department Unemployment Insurance Dataset

Notes

Data included in this analysis represents the labor market demand for positions most closely related to Agricultural Pest Control. Traditional labor market information was used to show current and projected employment based on data trends, as well as annual average awards granted by regional community colleges. Real-time labor market information captures job post advertisements for occupations relevant to the field of study and should not be used to establish current job openings, because the numbers may include duplicate job postings or postings intended to gather a pool of applicants. Real-time labor market information can signal demand and show what employers are looking for in potential employees, but is not a perfect measure of the quantity of open positions.