



2018 Horticulture Student and Program Survey

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From July 9 to November 1, 2018 we asked 252 two-year colleges and 100 four-year universities about the status of their horticulture programs. We received 83 responses from the two-year colleges (33% response rate) and 57 responses from the four-year universities (57% response rate). This survey followed up on and added to the first survey that was completed in 2014. At the time, we surveyed 152 two-year colleges and 76 four-year universities and had a 41% and 71% response rate, respectively. While we had a higher response rate in 2014, we surveyed fewer colleges and universities. Many of the non-responders in our current survey do not have formal horticulture programs, which may be the reason they did not respond.

Key Observations

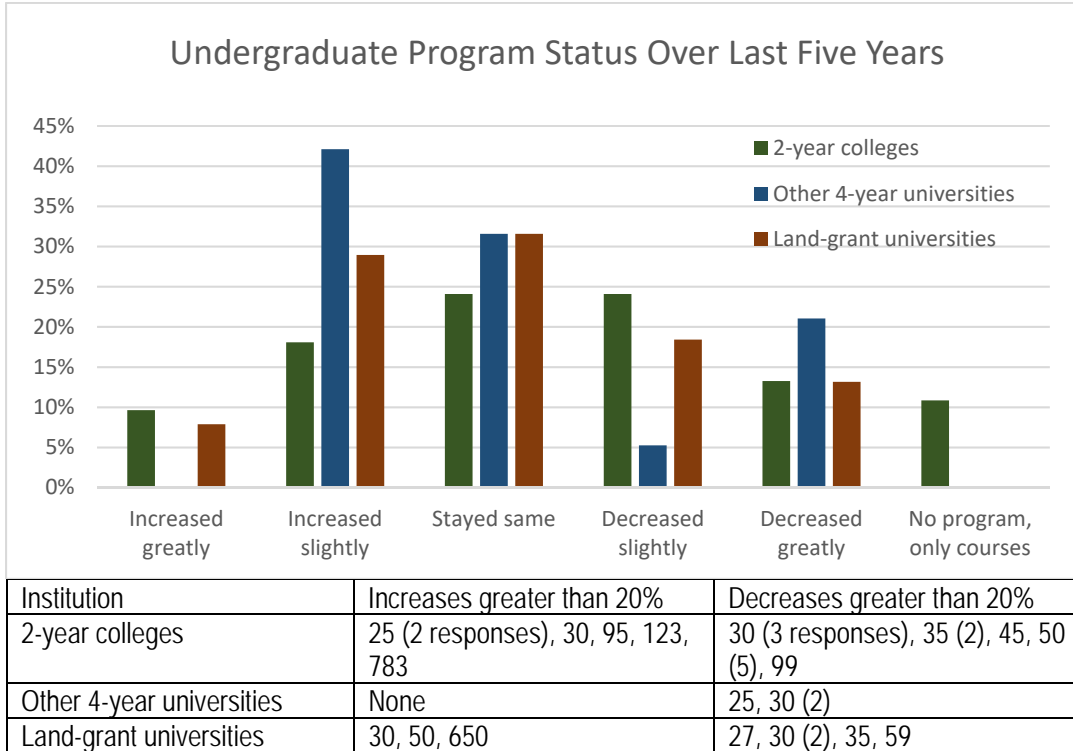
1. The overall number of undergraduate students is stable, with a majority of institutions either keeping the same number, or increasing, in the last five years (63.36%)
2. The majority of students arrive in the department as incoming freshman. However, internal transfers, external transfers and "other" are growing in significance. For example, in land-grant institutions, 27% of undergraduates are internal transfers and 34% are external transfers.
3. The overall number of graduate students is stable, with a vast majority of institutions either keeping the same number, or increasing, in the last five years (86.44%).
4. Horticulture includes a broad range of subjects, with ornamental-related topics the most commonly offered: greenhouse (cross-commodity); horticulture business, entrepreneurship, and/or marketing; IPM; landscape design (small scale) and/or construction and contracting; turfgrass; and woody ornamentals and floriculture (including arboriculture, interiorscaping).
5. The most common degree offered is an Associate degree with 72.45% of the institutions offering at least one Associate degree.
6. Departmental identity appears to have stabilized. While 16.43% of the institutions have always had their horticulture department combined with another department, more than half of the institutions (56.43%) have had their horticulture department combined with another department, with 23.57% in the last five years. The percentage of horticulture departments anticipated to be combined in a near future is fairly low. Interestingly, almost half of departments at two-year institutions continue to include the word horticulture compared with one third of departments at land-grant institutions.

1. Number of undergraduate students currently enrolled in the horticulture program.

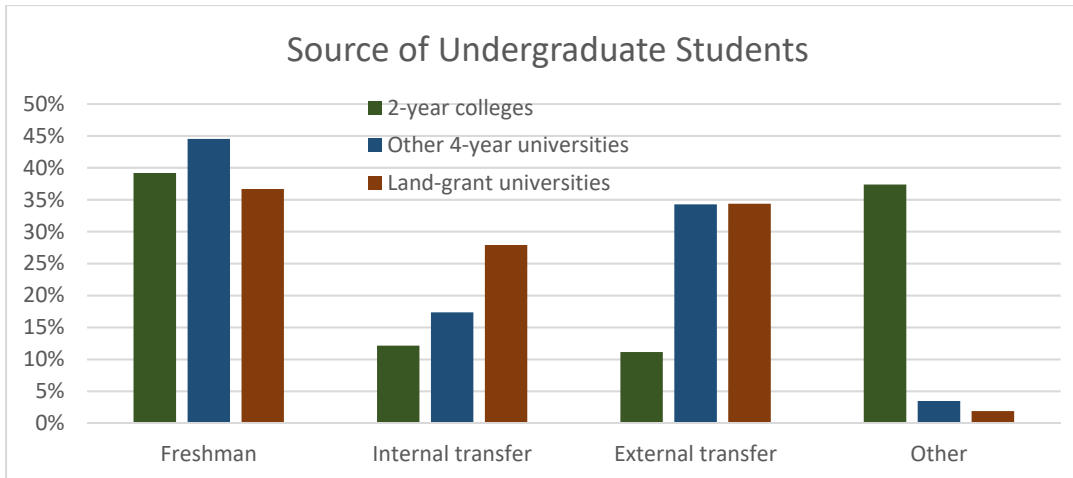
	2-year colleges	Other 4-year universities	Land-grant universities
Total number	4590	2566	1612
Average/institution	60	69	85
Range	2 to 300	6 to 230	5 to 280

Some schools only have plant science programs, which are included.

2. Enrollment status of undergraduate program. For those responding that student numbers had increase/decreased greatly, the percent increase/decrease is listed in table below graph.



3. Pathways by which horticulture undergraduate students arrive in the department.

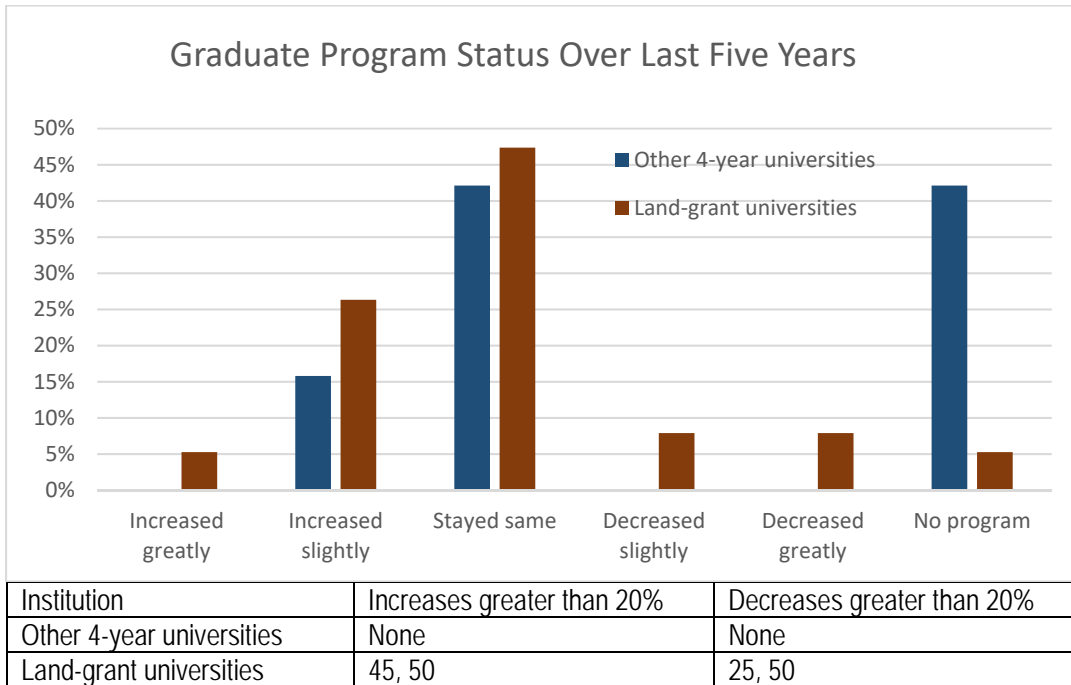


4. Number of graduate students currently enrolled in the horticulture program.

	Other 4-year universities	Land-grant universities
Total number	118	821
Average/institution	12	23
Range	2 to 40	1 to 100

Some schools only have plant science programs, which are included.

5. Enrollment status of graduate program. For those responding that their student numbers had increase/decreased greatly, the percent increase/decrease is listed in table below graph.



6. Topics consider to be part of horticulture (respondents could mark all that applied).

Topic	2-year colleges	Other 4-year univ. (%)	Land grant universities
Citrus	0.7	2.9	1.0
Biotechnology	0.4	2.9	6.4
Environmental science	6.2	5.7	8.1
Floriculture and floral design	4.8	8.6	5.7
Fruits, nuts, and/or vegetables (including viticulture)	8.0	8.0	10.8
Greenhouse (cross-commodity)	12.1	10.3	11.1
Horticulture business, entrepreneurship, and/or marketing	11.7	9.8	7.4



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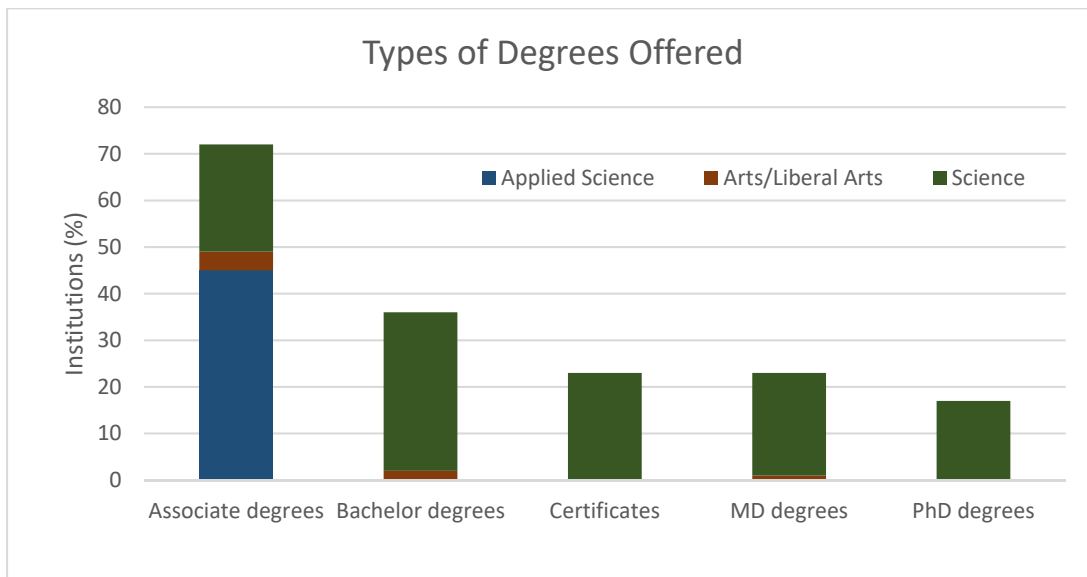
Horticulture therapy	0.9	2.3	0.7
IPM	11.2	7.5	6.4
Landscape design (small scale) and/or construction and contracting	11.2	9.2	6.8
Landscape architecture (large scale)	0.4	1.7	2.7
Plant breeding	1.6	5.2	8.4
Public gardens	3.7	6.3	5.1
Turfgrass	11.2	7.5	7.1
Woody ornamentals and floriculture (including arboriculture, interiorscaping)	10.4	9.8	9.8
Other	5.7 ¹	2.3 ²	2.4 ³

¹Irrigation water management (7 responses), Soils/fertility (6); Sustainable agriculture/ sustainable horticulture (5), Aquaponics/hydroponics/aquaculture (4); Herbaceous perennials and ornamentals (3), Permaculture (2), Plant propagation (2), Plant science (2), Laws and regulations, CEA (controlled environment agriculture), Primarily crop production, Stormwater management, Landscaping for wildlife/pollinators, Small market farming, Watershed protection, Best management practices, Pest control, Food as medicine, Botany, Native plant propagation and restoration ecology, Ag machinery, Urban tree care, Agricultural drainage, forestry.

²Propagation, Plant materials (ID), Native plants, Ornamental plant production, Hydroponics, Urban horticulture, Composting.

³Plant pathology (2 responses), Pre-Landscape Architecture undergraduate track, Postharvest physiology, Genomics/computational biology, Developmental biology, Natural products chemistry, Soil health and organic production, Entomology program, Urban agriculture, Pre and postharvest food safety, Organic and sustainable production, Plant propagation, Weed ID and ecology, Herbaceous landscape plants.

7. Types of degrees offered



8. Administrative status of department.

