

2026 NACTA JUDGING CONFERENCE ILLINOIS STATE UNIVERSITY



NACTA

NORTH AMERICAN COLLEGES
AND TEACHERS OF AGRICULTURE

ILLINOIS STATE

Agriculture

Horticulture

Contest Official Rules

Contest Chair:

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Hosted by Illinois State University

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Horticulture Contest Rules, Teams and Eligibility

1. All contestants must be currently enrolled in a two-year or four-year institution and pursuing an undergraduate degree. Two-year and four-year school will compete in separate divisions, but contest rules and components are the same for both divisions. A competing individual may compete in this contest up to two times as an official contestant in a NACTA Horticulture contest.
2. Each school may enter one team consisting of four (4) officially registered members. The members of the team must be designated at the start of the contest. All four team members scores will be added together and the total will count toward the team score in each testing event. The team with the highest score will win first place, the team with the second highest score will place second and so on. Individual placement will be scored the same, highest score will get first place, second highest score will get second place and so on.
3. Each college may enter as many additional official contestants as they want in addition to the official team. Additional contestants will compete for individual awards, but their scores will not count toward the team score. Additional contestants will pay the full registration fee. If not enough members are present from a college at the start of the testing, the participants from that school will compete in the individual portion of the testing.

Event Descriptions:

Team and individual participants will compete in 4 parts of the contest:

1. General Horticulture Knowledge Exam
2. Plant, Equipment, Tool, and Supply Identification
3. Problem Solving
4. Plant Judging

Part 1: General Knowledge Examination – 100 points

The general knowledge examination will consist of 50 multiple choice questions taken from basic introductory horticulture or plant science textbooks; such as Plant Science: Growth, Development, and Utilization of Cultivated Plants, 6th Ed. M. McMahon, Pearson, Practical Horticulture, 7th Edition, L.W. Rice and R.P. Rice, Pearson, Horticulture: Principles, Practices, & Career Opportunities, 2nd Ed., D.E. Kopsell and D.A. Kopsell, Great River Learning, Introduction to Horticultural Science, 2nd Ed., R.N. Arteca, Cengage, and Horticulture: Principles and Practices, 4th Ed., G. Acquaah, Pearson. The test will cover all aspects of horticulture except floral design. Contestants will receive 2 points for every correct answer.

Part 2: Plant, Equipment, and Tool Identification – 150 points

This portion of the contest will consist of approximately 55 live plants, plant specimens, or pictures, and 20 pieces or pictures of common horticultural equipment or tools. Contestants will identify plants from among the list provided in the Appendix that will include both correctly spelled common and scientific names. Contestants will identify equipment and tools from among the list provided in the Appendix. Contestants will receive 2 points for every correct answer.

Part 3: Problem Solving – 50 points

This portion of the contest will consist of 10 questions that are designed to evaluate the competitor's abilities to solve horticultural problems in categories such as cost analysis of greenhouse or nursery crop production, reading landscape installation plans and calculating cost of materials and supplies, or solving other basic horticultural problems such as fertilizer or chemical rate calculations. A simple calculator will be allowed. Contestants will receive 5 points for every correct answer.

Part 4: Plant Judging – 50 points

Contestants will use their knowledge of acceptable plant quality to rank the order of five classes of plants from 1 to 4, with 1 being the highest quality. Classes will be derived from woody landscape plants, interior foliage plants, and annual and perennial herbaceous plants. Each class will be worth 10 points.

Scoring:

Each individual contestant will compete in all four parts of the contest. Scores from each part will be added together to come up with a total individual score. Total possible individual points will be 350 points. Team/school scores will consist of the sum of the four individual team member's scores. Total possible team points will be 1,400 points.

In the event of a tie, tie breakers will be used as follows:

1. Scores on the General Knowledge Exam
2. Scores on the Plant, Equipment, and Tool Identification portion of the contest
3. The score from a select problem on the Problem Solving exercise
4. If still tied, a coin flip will determine placing

Contestants WILL be allowed to touch or handle any samples or equipment during any portion of the competition; however, they are **not allowed to damage or move samples**. The use of electronic devices, including phones or smart watches, will NOT be allowed. A simple calculator may be used during the Problem Solving portion of the contest.

Appendix: Sample Plant and Equipment List

EQUIPMENT AND SUPPLIES

anvil-and-blade pruner	peat moss
bow saw	Perlite
brick paver	pick axe
broadcast (cyclone) spreader	pole pruner
bulb planter	post-hole digger
compressed air sprayer	power rake
chain saw	pruning saw
duster	reel mower
edger	rotary mower
engineers scale	rototiller
erosion netting	round point shovel
garden (spading) fork	scoop shovel
garden (bow) rake	sharpening stone
garden spade	soaker hose
gravity (drop) spreader	sod lifter
grass shears	soil auger
hedge shears	string trimmer
hoe	sticky card
impulse sprinkler	thatch rake
landscape fabric	tree caliper
leaf rake	tree wrap
loppers	trowel
mist nozzle	turf thatcher
mower blade balancer	vermiculite
oscillating sprinkler	verticut mower

TURFGRASSES

Common Name	Scientific Name
Bermudagrass	<i>Cynodon dactylon</i> cv.
Bluegrass, Kentucky	<i>Poa pratensis</i> cv.
Buffalograss	<i>Buchloe dactyloides</i>
Fescue, tall	<i>Festuca arundinacea</i>
Zoysiagrass	<i>Zoysia</i> sp.

GROUND COVERS & VINES

Common Name	Scientific Name
Ajuga, Carpet Bugle	<i>Ajuga reptans</i> cv.
Boston Ivy	<i>Parthenocissus tricuspidata</i>
Clematis	<i>Clematis</i> sp.
English Ivy	<i>Hedera helix</i>
Honeysuckle, Halls	<i>Lonicera japonica</i>
Japanese Spurge	<i>Pachysandra terminalis</i>
Periwinkle	<i>Vinca minor</i>
Wintercreeper	<i>Euonymus fortunei</i> cv.

BEDDING PLANTS

Common Name	Scientific Name
Ageratum	<i>Ageratum mexicanum</i>
China Aster	<i>Callistephus chinensis</i>
Cockscomb	<i>Celosia argentea</i>
Coleus	<i>Solenostemon scutellaroides</i>
Dusty Miller	<i>Senecio cineraria</i>
Impatiens	<i>Impatiens</i> hybrid
Ivy Geranium	<i>Pelargonium peltatum</i>
Madagascar Periwinkle	<i>Catharanthus roseus</i>
Marguerite Daisy	<i>Argyranthemum frutescens</i>
Marigold	<i>Tagetes</i> species
Pansy	<i>Viola x wittrockiana</i>
Petunia, Common Garden	<i>Petunia x hybrida</i>
Regal (Lady Washington) Geranium	<i>Pelargonium x domesticum</i>
Salvia	<i>Salvia splendens</i>
Sweet Alyssum	<i>Lobularia maritima</i>
Snapdragon	<i>Antirrhinum majus</i>
Wax Begonia	<i>Begonia x semperflorens-cultorum</i>
Zinnia	<i>Zinnia elegans</i>
Zonal Geranium	<i>Pelargonium x hortorum</i>

SHRUBS

Common Name	Scientific Name
Arborvitae	<i>Thuja occidentalis</i> cv.
Barberry, Japanese	<i>Berberis thunbergii</i>
Boxwood, Common	<i>Buxus sempervirens</i>
Cotoneaster	<i>Cotoneaster</i> sp.
Crapemyrtle	<i>Lagerstroemia indica</i>
Euonymus, Winged	<i>Euonymus alatus</i>
Firethorn	<i>Pyracantha coccinea</i>
Forsythia	<i>Forsythia x intermedia</i> cv.
Holly	<i>Ilex</i> sp.
Hydrangea, Oakleaf	<i>Hydrangea quercifolia</i>
Juniper	<i>Juniperus</i> sp.
Lilac, Common	<i>Syringa vulgaris</i> cv.
Pine, Mugo	<i>Pinus mugo</i>
Quince, Japanese	<i>Chaenomeles speciosa</i> cv.
Rose-of-Sharon	<i>Hibiscus syriacus</i>
Spirea, Bumald	<i>Spirea x bumalda</i>
Sweet Mockorange	<i>Philadelphus coronarius</i>
Viburnum	<i>Viburnum</i> sp.
Yew	<i>Taxus</i> sp.

FOLIAGE PLANTS

Common Name	Scientific Name
Aluminum Plant	<i>Pilea cadierei</i>
Artillery Plant	<i>Pilea microphylla</i>
Asparagus "Fern"	<i>Asparagus setaceus</i>
Barrel Cactus	<i>Echinocactus</i>
Benjamin Fig	<i>Ficus benjamina</i> 'Exotica'
Boston Fern	<i>Nephrolepis exaltata</i>
Chinese Evergreen; Aglaonema	<i>Aglaonema commutatum</i>
Corn Plant Dracaena	<i>Dracaena fragrans</i> 'Massangeana'
Creeping Rubber Plant	<i>Ficus pumila</i>
Croton	<i>Codiaeum variegatum pictum</i>
Crown of Thorns	<i>Euphorbia milii splendens</i>
Cutleaf "Philodendron"	<i>Monstera deliciosa</i>
Rubber Plant	<i>Ficus elastica</i>
Dwarf Shefflera; Dwarf Octopus Tree	<i>Heptapleurum arboricola</i>
Emerald Ripple Peperomia	<i>Peperomia caperata</i>
Friendship Plant	<i>Pilea involucrata</i>
Golden Pothos; Devil's Ivy	<i>Epipremnum aureum</i>
Heartleaf Philodendron	<i>Philodendron scandens oxycardium</i>
Jade Plant	<i>Crassula argentea</i>
Nephtytis	<i>Syngonium podophyllum</i>
Nerve Plant	<i>Fittonia verschaffeltii</i>
Norfolk Island Pine	<i>Araucaria heterophylla</i>
Parlor Palm	<i>Chamaedorea elegans</i>
Peace Lily; White Anthurium	<i>Spathiphyllum clevelandii</i>
Prayer Plant	<i>Maranta leuconeura kerchoviana</i>
(Prickly Pear) Cactus	<i>Opuntia</i> tribe
"Purple Passion" Velvet Plant	<i>Gynura aurantiaca</i>
Red Edged Dracaena	<i>Dracaena cincta</i>
Shrimp Plant	<i>Justicia brandegeana</i>
Snake Plant	<i>Sansevieria trifasciata</i>
Spider Plant	<i>Chlorophytum comosum</i>
Spotted Dumbcane	<i>Dieffenbachia maculata</i>
Sprenger "Fern"	<i>Asparagus densiflorus</i> 'Sprenger'
Swedish Ivy	<i>Plectranthus mummularis</i>
Variegated Peperomia	<i>Peperomia obtusifolia</i> 'Variegata'
Wandering Jew	<i>Zebrina pendula</i>
Watermelon Peperomia	<i>Peperomia argyreia</i>
Wax Plant	<i>Hoya carnosia</i>
Zebra Plant, Aphelandra	<i>Aphelandra squarrosa</i>

FLOWERING PLANTS

Common Name	Scientific Name
African Violet	<i>Saintpaulia ionantha</i>
Amaryllis	<i>Hippeastrum</i> hybrid
Astilbe	<i>Astilbe</i> hybrid
Azalea	<i>Rhododendron</i> sp.
Bird of Paradise	<i>Strelitzia reginae</i>
Cattleya Orchid Hybrid	<i>Cattleya</i>
Christmas Cactus	<i>Schlumbergera bridgesii</i>
Common Garden Canna	<i>Canna x generalis</i>
Cymbidium Orchid	<i>Cymbidium</i>
Daffodil	<i>Narcissus pseudonarcissus</i>
Daylily	<i>Hemerocallis</i>
Dutch Iris	<i>Iris x xiphium</i>
Fancy-leaved Caladium	<i>Caladium x hortulanum</i>
Flag, Bearded Iris	<i>Iris x germanica florentina</i>
Flamingo Lily; Anthurium	<i>Anthurium x andraeanum</i>
Florist's Cineraria	<i>Senecio x hybridus</i>
Florist's Chrysanthemum	<i>Chrysanthemum x morifolium</i>
Florist's Cyclamen	<i>Cyclamen x persicum</i>
Freesia	<i>Freesia x hybrida</i>
Gardenia	<i>Gardenia jasminoides</i> 'Fortuniana'
German (Persian) Violet	<i>Exacum affine</i>
(Garden) Gladiolus	<i>Gladiolus x hortulanus</i>
Gloxinia	<i>Sinningia speciosa</i> Fyiana Group
Hens and Chicks	<i>Echeveria</i>
Plantain Lily; Hosta	<i>Hosta undulata</i>
Hyacinth	<i>Hyacinthus orientalis</i>
Hybrid (Garden) Lily	<i>Lilium x hybridum</i>
Hybrid Tea Rose	<i>Rosa</i> hybrid Class Hybrid Tea
French (Florist's) Hydrangea	<i>Hydrangea macrophylla</i>
Kalanchoe	<i>Kalanchoe x blossfeldiana</i>
Ladyslipper Orchid	<i>Paphiopedilum x hybrid</i>
Peony	<i>Paeonia</i> species
Phalenopsis (Butterfly) Orchid	<i>Phalaenopsis</i>
Pocketbook Plant	<i>Calecolaria crenatiflora</i>
Poinsettia	<i>Euphorbia pulcherrima</i>
Shasta Daisy	<i>Leucanthemum x superbum</i>
Silver Dollar Gum	<i>Eucalyptus polyanthemus</i>
Spring Heath	<i>Erica carnea</i>
Statice	<i>Limonium sinuatum</i>
Stephanotis	<i>Stephanotis floribunda</i>
Thanksgiving Cactus; Crab Cactus	<i>Schlumbergera truncata</i>
Transvaal Daisy	<i>Gerbera jamesonii</i>
Tuberous Begonia	<i>Begonia x tuberhybrida</i>
Tulip	<i>Tulipa</i> species

TREES

Ash, Green	<i>Fraxinus pennsylvanica</i>
Baldcypress	<i>Taxodium distichum</i>
Birch, River	<i>Betula nigra</i>
Catalpa	<i>Catalpa</i> sp.
Cottonwood	<i>Populus deltoides</i>
Coffeetree, Kentucky	<i>Gymnocladus dioicus</i>
Crabapple, Flowering	<i>Malus</i> sp.
Elm, American	<i>Ulmus americana</i>
Elm, Chinese	<i>Ulmus parvifolia</i>
Elm, Siberian	<i>Ulmus pumila</i>
Ginkgo	<i>Ginkgo biloba</i>
Goldenraintree	<i>Koelreuteria paniculata</i>
Hackberry	<i>Celtis occidentalis</i>
Honeylocust	<i>Gleditsia triacanthos</i>
Linden, Littleleaf	<i>Tilia cordata</i>
Magnolia, Saucer	<i>Magnolia x soulangiana</i>
Maple, Japanese	<i>Acer palmatum</i>
Maple, Norway	<i>Acer platanoides</i>
Maple, Red	<i>Acer rubrum</i>
Maple, Silver	<i>Acer saccharinum</i>
Maple, Sugar	<i>Acer saccharum</i>
Mulberry	<i>Morus</i> sp.
Oak, Bur	<i>Quercus macrocarpa</i>
Oak, Chinquapin	<i>Quercus muehlenbergii</i>
Oak, Pin	<i>Quercus palustris</i>
Oak, Red	<i>Quercus rubra</i>
Osage Orange	<i>Maclura pomifera</i>
Pear, Callery	<i>Pyrus callervana</i>
Pine, Scotch	<i>Pinus sylvestris</i>
Pine, Ponderosa	<i>Pinus nigra</i>
Pine, White	<i>Pinus strobus</i>
Redbud	<i>Cercis canadensis</i>
Russian Olive	<i>Elaeagnus angustifolia</i>
Spruce, Colorado	<i>Picea pungens</i>
Spruce, Norway	<i>Picea abies</i>
Sweetgum	<i>Liquidambar styraciflua</i>
Sycamore	<i>Plantanus occidentalis</i>
Willow	<i>Salix</i> sp.