Plants that Deer Do Not Eat

FLORICULTURE
FIELD DAY
AUGUST 9, 2016

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Cornell University

Why does Cornell University exist on Long Island?
Suffolk County Agriculture:

No other county in NY is more important or more diverse.
Leading county in NY for crop agriculture based on wholesale value.

LIHREC has specialists in all areas of horticulture:

- Floriculture & Greenhouse Industry
- Fruit: Viticulture
- Vegetables/potatoes
- Woody ornamentals and landscape maintenance

Cross Commodity Specialties:

- Plant disease
- Weed science
- Entomology
- Plant Tissue Culture

68 acres = 28 hectares

Winter-Hardy
ALSTROEMERIA – Lily of the Incas

'Tangerine Tango'
'Mauve Majesty'

Downy Mildew-Resistant
Impatiens

PLANT BREEDING

Vitex agnus-castus
Chaste Tree

Aren't they cute!?!?

Odocoileus virginianus
White-Tail Deer

Aren't they cute!?!?

However...

Deer are the #1 problem for farmers on Long Island!!!

Deer Resistant Plants
No plant is "RESISTANT"

Other Damage:
> Rubbing antlers
Other Damage:
- Physical damage: stepping on the plants!

Other Damage:
- Cosmetic damage: nibbling at the buds

Other Damage:
- Little “presents” in the garden.

The deer population in the USA has increased from 500,000 in the early 1900’s to 15 million in 2014!

1.5 million vehicles collide with deer each year

The economic damage for farmers is immeasurable

The incidence of diseases, like Lyme disease, increases with deer populations

The only GUARANTEED ways to prevent deer damage on your plants
1. Deer fence (8’ or higher)
2. Population management

Other Ways to prevent deer damage on your plants:
- Repellents
- Elevate your Plants
- Fence your Plants
Choose your Plants Correctly

HOW can we SCIENTIFICALLY learn about plants that deer do not like to eat?

1. Replicate
2. Controlled Conditions

How do we study deer resistant plants?

Juniper
20 cultivars & species

If a deer is hungry enough it will eat anything......

Juniper
Woodland Garden

If a deer is hungry enough it will eat anything......

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Woodland Garden

How to study deer resistant plants

Woodland Garden

Juniper
20 cultivars & species

If a deer is hungry enough it will eat anything......

Woodland Garden

Juniper
20 cultivars & species

Cleome Hasslerana
Spider Flower

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Spider Flower

Cleome Rosalita™

Colocasia Esculenta
Taro or Elephant Ear

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Nicotiana Sylvestris
Tobacco

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Tobacco
Annual Plants

**Pennisetum setaceum ‘Rubrum’**
Purple Fountain Grass

**Aconitum napellus**
Monkshood

**Agastache foeniculum**
Anise-Hyssop

**Herbaceous Perennial Plants**

**Aconitum napellus**
Monkshood

**Herbaceous Perennial Plants**

**Amsonia tabernaemontana**
Blue Star

**Artemesia spp.**
Sages...

**Artemesia abrotanum**
Tangerine Southernwood

**Artemesia schmidtiana**
Wormwood

**Artemesia ludoviciana**
White Sage

**Artemesia ‘Powis Castle’**

**Asclepias tuberosa**
Butterfly Weed

**Asclepias syriaca**
Milkweed

**Herbaceous Perennial Plants**

**Allium**
Onions!

**Allium tuberosum**
Garlic Chives

**Allium schoenoprasum**
Chives

**Ansonia tabersemontana**
Blue Star

**Artemesia abrotanum**
Tangerine Southernwood

**Artemesia ‘Powis Castle’**

**Asclepias syriaca**
Milkweed

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**Herbaceous Perennial Plants**
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- **Calamintha grandiflora**
  - *Calamint*
  - "White Cloud"

- **Calamintha ‘White Cloud’**

- **Carex spp.**
  - *Japanese Sedges*
  - *Carex plantaginea Variegata*
  - *Carex morrowii aurea Variegata*
  - *Carex flagellifera - Weeping Brown Sedge*

- **Euphorbia spp.**
  - *Spurge*
  - *E. polychroma*
  - *E. cyparissias*
  - *E. characias*

- **Euphorbia myrsinites**
  - *Donkey Tail Spurge*

- **Helleborus spp.**
  - *Lenten Rose*
  - *H. niger - Christmas Rose*
  - *H. orientalis - Lenten Rose*

- **Lamiastrum galeobdolon**
  - *Yellow Archangel*

- **Lamium maculatum**
  - *Spotted Dead Nettle*

- **Lavandula angustifolia**
  - *Lavender*
Herbaceous Perennial Plants

Ligularia dentata
Ragwort

Mentha spp.
Mints

Nepeta saturei
Catnip

Origanum vulgare (marjoram)
Oregano (Marjoram)

Pachysandra

Paeonia hybrids
Chinese Peony

Perovskia atriplicifolia
Russian Sage

Podophyllum peltatum
Mayapple
Herbaceous Perennial Plants

Salvia officinalis
Sage

Santolina spp.
Lavender Cotton

Stachys byzantina
Lamb’s Ear

Tanacetum parthenium
Old Name: Chrysanthemum parthenium
Feverfew

Thymus spp.
Thyme

Vinca minor
Periwinkle

Wood Perennial Plants

Buddleia davidii
Butterfly Bush

Vitex agnus-castus
The Chaste Tree

Buxus microphylla
Boxwood