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CONTENTS

Specific Ivy Questions  2
AIS Chapter Listing  2
Regional Ivy Collections  2
List of Illustrations  3
Index of Sponsors  3
President’s Message  4-5
Ivy of the Year: Hedera helix ‘Duck Foot’  6-7
Gardenshapes™ The Newest Concept in Topiary  8-11
Sabina Sulgrove Retiring  12-13
New Registrar of Hedera  14-15
Commercial Production of English Ivy  16-26

2003 NEW REGISTRATION:
Hedera helix ‘Leprechaun’  27-31

2003 OLDIES BUT GOODIES:
Hedera helix ‘Green Finger’, ‘Parsley Crested’,
‘Pixie’, ‘Plume d’Or’  32-38

Hedera helix ‘Curly Locks’  39-41

‘Mini-Ester’, ‘Minty’  42-48

Tips for Better Pictures in Your Own Backyard  50-57

Photo by Rachel Cobb.
List of Illustrations

*Hedera helix ‘Duck Foot’*  
Cover, 6

*Hedera helix ‘Lady Frances’*  
7

*Hedera helix ‘Teardrop’*  
7

*Hedera helix ‘Golden Ingot’*  
7

**Topiary Examples**  
8-11

Dr. Sabina Mueller Sulgrove, Taxonomist  
12

Russell A Windle, International Registrar of *Hedera*  
14

*Hedera helix ‘Leprechaun’*  
28-31

*Hedera helix ‘Green Finger’*  
33

*Hedera helix ‘Pixie’*  
36

*Hedera helix ‘Parsley Crested’*  
37

*Hedera helix ‘Curly Locks’*  
41

*Hedera helix ‘Ardingly’*  
43

*Hedera helix ‘Eva’*  
44-45

*Hedera helix ‘Mini-Ester’*  
45

*Hedera helix ‘Itsy Bitsy’*  
46

*Hedera helix ‘Minty’*  
47

**Tips for Better Pictures**  
51-57

List of Sponsors

Hobby Greenhouse Association  
5

Samia Rose Topiary  
5

*Hedera* etc.  
13

The Begonian  
13

Mary’s Plant Farm & Landscaping  
15

Cliff Finch’s Topiary Zoo  
15

Gardenworks  
21

Gilson Gardens  
48

Evergreen Nursery  
49

Riverbend Nursery, Inc.  
49

Vine Acres Nursery, Inc.  
49

Euro American  
49

Commercial Sponsors List  
2
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* Web site sponsor
President’s Message
Suzanne Warner Pierot

It is hard for those of us who collect, treasure and lovingly tend our ivy, to realize there are some who consider it a “noxious weed”.

I was upset the first time I heard ivy called a “Noxious Weed” and quickly retorted that the age-old definition of a weed is a “plant growing where it isn’t wanted.” I couldn’t imagine my *Hedera helix* ‘Pixie’, ‘Conglomerata’ or ‘Spetchley’ could ever grow more than an inch or two a year and certainly couldn’t get “out of hand.” However, upon learning that among those who consider ivy a “Noxious Weed” and an “Invasive Plant” are the Departments of Agriculture of some State Governments – mainly Oregon and Washington – I began to take the criticism seriously.

I learned there is a problem — mainly in the warm moist climate of the Pacific Northwest — with ivy growing out of control in uncared-for areas, but the main culprit was not *Hedera helix*, but *Hedera hibernica* ‘Hibernica’, the fast growing Irish ivy. But what surprised me even more was that the Departments of Agriculture were branding all English Ivy, *Hedera helix* and its numerous cultivars, as an obnoxious weed. The Departments wanted to ban my tiny slow-growing English Ivy ‘Pixie’ along with the fast growing Irish ivy.

I further learned they were banning the wild rose, *Rosa multiflora*, also growing rampantly in the forests, and calling it, too, a “Noxious Weed”. I noticed they didn’t ban ALL roses because there was one fast growing variety. Why? I asked, did they want to ban ALL IVY because of a few fast growing varieties?

Since that time the American Ivy Society’s experts, Dr. Sabina Sulgrove, Taxonomist, and Russell Windle, Registrar, have spent much time trying to get to the bottom of this problem. We have learned that “Noxious Weed” is a legal definition used in legislation to regulate the propagation and sale of plants, and to obtain funding for research and control. Some plants receive “Noxious Weed” status, because they are invasive in some way. The American Ivy Society believes the term “invasive” needs to be carefully defined with respect to ivies.

Some ivy cultivars grow very slowly; others are much faster-growing. Only a few ivies have growth habits that may lend themselves to be rampant and only then in certain climates under certain conditions. The ability of an ivy cultivar to spread quickly is based on its genetic makeup, the climate and microclimate of the area in which it is planted, and the influence of human
activities in the surroundings. We believe the Departments of Agriculture should determine which ivy cultivars are causing a problem in a particular area. They should also determine at each site the specific conditions that are responsible for the problem.

In the next issue of this Journal we will discuss the problem of what is called “Invasive Ivy” and offer our suggestions. We do know that what is a problem with a few ivies in warm moist areas, is not a problem in other areas. We believe there is a right ivy for the right spot, and that invasive problems should be dealt with locally – not globally.
Hedera helix ‘Duck Foot’ has been selected by the American Ivy Society as “Ivy of the Year” for 2004.

This miniature ivy has leaves that really do look like a duck’s foot! With small leaves not more than an inch across and self-branching habit of growth, it is well suited for pots, baskets and topiaries. Don’t let this diminutive ivy fool you; it is also very winter hardy. In test gardens it has survived to at least zone 5 – to minus 20 degrees F.

‘Duck Foot’ has been around since the late 1970’s when it was discovered as a sport of Hedera helix ‘Merion Beauty’. It has three or five rounded lobes, and is very self-branching. The new growth is shiny, light green, becoming darker with age.

“For successful outdoor planting, keep a few things in mind,” says Russell A. Windle, Registrar for the American Ivy Society. “Green ivies like ‘Duck Foot’ will tolerate deeper shade, as well as bright conditions. Plant ivies deeper into the ground than they were growing in the pots. Remove the lower two or three leaves and bury the plant to the lowest leaf. This will help the ivy to root along the bare stem. When possible, plant the ivies where they will be protected from the winter sun and wind which causes the most winter damage to ivies.”

To join the American Ivy Society: $20 annually. Includes free plant, the *Ivy Journal*, and three Newsletters.

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American Ivy Society website: http://www.ivy.org

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**IVY OF THE YEAR 2001**


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**IVY OF THE YEAR 2002**

*Teardrop* (H). (AIS 88-153, 92-089). As the name implies, leaves are teardrop-shaped. Leaves mostly unlobed, but occasionally two or more lobes can be found with a heart-shaped base. Leaf tip elongated to a point. Slow growing and stiffly branched. The leaf shape is probably the result of a fasciated petiole.

---

**IVY OF THE YEAR 2003**

*Golden Ingot* (V, I). (Synonym: ‘Golden Inge’). AIS 90-047. Registration Number 9790047. Medium-large, more-or-less flat leaves with central blotch of greens and grays on a golden-yellow background, bordered by irregular; coalesced green flecks at the margin.

All photos on pages 6-7 by Rachel Cobb
Topiary has been around since people began to garden. Throughout the history of gardening shaping plants into defined figures has been as compelling as sowing seeds. It is the humble gardener’s way of expressing artistic vision.

Over the years we have defined topiary and developed many tools and techniques to enhance this art form. Generally, we classify or categorize topiary into groups and styles. Many gardening practices such as hedging, espalier, and grafting are recognized as a form of garden art or topiary. All of these things are achieved by pruning, training or planting into man-made form. Topiary has been divided into three basic groups.

1. **Woody Topiary or Prune To Shape:**
   Pruned to Shape: This style of topiary is accomplished by pruning a shrub or tree to develop the shape. The plants are growing from the ground or a container and are supported by their own stem giving the name “woody” topiary. Sometimes the plants are grown inside of a frame for pruning guidance.

2. **Trained Up Topiary:** This style of topiary requires a frame to create the shape. The plants used are vines, trailing ground covers or young shrubs with very flexible stems. The vines, or stems, are trained up and onto the form from pots or the ground. Trained Up Topiary can be as basic as ivy grown on a fence or extremely elaborate shapes and designs. Espalier is a classic style of Trained Up Topiary.

3. **Moss Filled Topiary:** This is the most modern form of topiary and often the most whimsical including shapes from animals to airplanes. The shape is formed by filling a metal frame with moss and planting the plants into the moss. Ivy is the most popular plant used in this style but
there is a long list of other plants that work. The significant aspect of this style is that no pot is required and the forms are portable. It is also the quickest way to design and develop topiary.

**GARDENSHAPES™ Living Topiary:**
Recently, Smithers Oasis® has develop a new revolutionary style of topiary called GARDENSHAPES™. For years this Ohio based company has been making products to enhance the horticultural industry. The most well known product is Oasis® or the green floral foam used by every floral designer worldwide. For many years they have also been developing and making other foam products used by the floral and greenhouse industry. Many plant propagators use one of Smithers Oasis® foam products for rooting plants. The unrooted cuttings are stuck directly into the a preformed foam plug, allowed to root under mist, and when ready, the plant foam plug and all are planted directly into the potting media and grown on.

The Smithers Oasis® research department has developed a foam formula specifically for the topiary world and shaped it into whimsical animal shapes. The forms are covered with moss and attractive even if they are not planted. The foam is developed to have the maximum water holding capacity without keeping the roots too wet. Any excess water drains away. The form (rabbit, turtle, frog or snail) is formed with an opening centrally located to hold the plant.

**There are several advantages to this new product.**
The first and most important advantage is that they are very easy to make even if you are a first time gardener. Each form comes with instructions on how to make it and how to take care for it. The GARDENSHAPES™ are available planted or “do-it-yourself.”
HOW TO:

1. When you get your new GARDENSHAPES™ remove the circular plug from the opening in the back. Fill the cavity with water and allow it to soak into the foam. Repeat this until you have added about 2 quarts of water.

2. The cavity in the GARDENSHAPES™ is pre-formed to hold a 4” pot of ivy. Remove the ivy from the pot and insert it soil and all into the cavity. You can add a little extra soil if needed.

3. Using fern pins, anchor the ivy runners to the foam form spreading them out in several directions to encourage even coverage as it grows.

4. When watering the GARDENSHAPES™, water over the entire form to encourage the ivies to root into the foam just as it does with moss filled topiary.

What could be easier? That is all it takes to plant your new GARDENSHAPES™ critter. And watering is much easier as the foam has great water-holding capacity yet drains of excess. Generally, these critters will not dry out as often as moss and it less likely they will be over-watered — a problem with moss filled topiary.

Another advantage is that the GARDENSHAPES™ will be much happier indoors than moss filled topiary. Although both styles of topiary will be happier living outdoors in the shade the GARDENSHAPES™ can spend a longer period of time indoors. Often when moss filled topiary are brought into the house the environment is warm and dark with poor air circulation. Since moss is completely organic it will begin to decompose in these conditions. Sometimes the moss gets moldy and even begins to smell. Also, the warm damp moss is the perfect hiding places for insects and diseases that could cause injury to the plant. The foam does not encounter these problems. The ivy may not be happy living indoors too long but the foam will not breakdown or harbor pests.

At Samia Rose we have been testing out GARDENSHAPES™ for over two years and feel confident that you will be happy with this great new product. We are continuing our work with Smithers Oasis® and helping to design more whimsical and adorable pets for your garden.

GARDENSHAPES™ are available through Samia Rose Topiary. Please visit our web site at: www.SRTopiary.com • http://www.srtopiary.com or call us at: 800- IVTopiary (488-6742)

Pat Hammer is the owner of Samia Rose Topiary and the author of The New Topiary.
A group of ladies making their own GARDENSHAPES™ frogs at a Samia Rose Topiary class. A great group project for your garden club.

The GARDENSHAPES™ turtle planted with succulents instead of ivy.
SABINA SULGROVE RETIRING

After 25 years Dr. Sabina Mueller Sulgrove, Ph.D is retiring as the American Ivy Society’s Director of Research and International Registrar for Hedera but will become our official “Taxonomist”. She will remain a member of the AIS Board of Directors and continue with her favorite ivy projects — but at a more leisurely pace.

Suzanne Warner Pierot, President of the American Ivy Society said: “We are so grateful to Sabina for all she has done for the Society and for the world of Hedera. She is a gifted horticultural writer, editor, lecturer and photographer and we are delighted she will be our taxonomist as well as an active Board Member. Stepping into her place will be Russell A. Windle, (see following article) who has worked with Sabina for the past 15 years”.

Pat Hammer, Past President of the AIS said, “Over the past 25 years Dr. Sulgrove gave the American Ivy Society the professional touch. Her knowledge and skills quickly led us to the top when it came to ivy. She started and developed the AIS Research Center, organized and managed the Standard Reference Collection, and developed our Ivy Journal into a serious plant reference. Over the past 10 years she has had the forward vision to selflessly mentor Russell Windle so that he would be ready to take on an important part of what makes AIS special.”

Affectionately known as the “Head Hedera” with “Ivylady” as her email name, Sabina went to Swarthmore College and the University of North Carolina at Chapel Hill where she received her Ph.D in Plant Taxonomy and Biosystematics with a minor in genetics. Much of her graduate work involved leaf morphology, primarily in blueberries. It is interesting to note the parallels in ivies and blueberries: both plants have different juvenile and adult forms. Also the techniques used to study blueberry leaves can be used to study ivies.

“In the 1970’s I was working at the Cox Arboretum where they had a collection of about 50 ivies – mostly unnamed”, said Sabina. “I joined the American Ivy Society in 1974 to learn about ivies and see whether I could straighten out the names in the Arboretum’s collection. Little did I know that before long I would be straightening out ivy names on a much larger scale. Today there are over 400 named cultivars.”
“As Registrar, my goal was to bring the precision of botanical descriptions to the cultivated ivies. Taxonomists have their own jargon for describing plants, but I wanted to describe an ivy in plain English.”

Sabina says, “Now is a good time to retire. My most recent 4-year appointment as Research Director and Registrar has expired and it is time to step down and let someone else take over. I am delighted that Russell Windle will become the new Registrar and Director of Research. Russ and I have worked together for almost 15 years and I know that he has a good eye for cultivars and the ability to describe them”.

Sabina’s husband Bob retired from Lucent Technologies in Columbus, Ohio, two years ago – and has been asking when she was going to retire. “Retirement” says Sabina, is an opportunity to take your life in a completely different direction, to follow whims as they arise, to spend more time with the grandchild(ren), and family. We have a 2-year-old grandchild in Richmond, Virginia and two more grandchildren on the way”.

Although Sabina is retiring as Registrar we are delighted that she has promised to “be there” for us with her guidance and council. We are going to hold her to it.

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you haven’t seen them all.

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NEW REGISTRAR OF *HEDERA*

The American Ivy Society is proud and happy to announce that Russell A Windle has been chosen as the new International Registrar of *Hedera*.

Since 1998 Russ has been the Assistant Director of Research working with previous Registrar, Dr. Sabina M. Sulgrove (see previous article) identifying and registering ivy cultivars as well as writing horticultural descriptions. He has become affectionately known as the “Ivy Guy” because of his many appearances on the Martha Stewart television program.

We asked him to tell us how he got interested in plants in general and ivy in particular and how he came to have an extensive ivy catalog and one of the largest collections of *Hedera* in the world (over 500 different varieties) at his nursery, “*Hedera etc*” in Lionville, Pennsylvania.

“I guess I just grew up with gardening around me”, he said. “As a small boy, we always had a vegetable garden in the back yard. My father had landscaped our property and my grandmother and step-grandmother were both avid gardeners with flowerbeds all around.

“I used to dig up discarded flowers from my neighbors compost pile, wild violets, beard iris etc., plant them in cleaned out soup cans and take them door to door and sell them. I guess I was born to be in plants.

“My interest in plants grew, and as a teenager I worked at some local garden centers. I had the normal collection of plants in the windows of my house: African violets, Wandering Jew, and yes, the occasional ivy.

“At Delaware Valley College I found out about the American Ivy Society. I had no real knowledge of the extent of ivy cultivars that existed, although we were told of the more common varieties in some of my college classes. I got my Degree in Ornamental Horticulture in 1982.

“Ivies really fascinated me because of their ability to mutate, and I was always looking for something new. I was mesmerized by all of the different ivies out there, but couldn’t find them at the local garden centers, so I joined the American Ivy Society and started collecting. Gardeners are generous when it
comes to plants, and soon I was trading and buying ivies from all over.

“I built a small Geodesic Dome Greenhouse at my Mom’s home to house my ever growing collection. By this time I had become active with AIS and had met Pat Hammer who helped me greatly expand my collection. I also started meeting ivy growers from Great Britain, and started buying plants from them.

“During this time frame, I had graduated from Delaware Valley College, and was working in a commercial greenhouse operation. Part of my responsibilities was growing ivies. I met my partner Johanna Milne while working at this greenhouse.

“My ivy collection continued to grow and people were starting to come to me to get named varieties, since it was still difficult to get good named ivies from garden centers. I had dreamed of starting my own ivy business, and in 1993 left my job and started work on Hedera etc. It took me about a year to get it up and running as I built the greenhouses myself. 1994 was the first year of operation. Johanna has worked beside me building the greenhouses and working to propagate all of the ivies we sell.

Life has changed a great deal for me since then. I have worked as Assistant Director of Research for the American Ivy Society and have worked with ivy growers from Japan, Germany, France, England and Scotland.

“Ivy for me has been a hobby that got out of control. It’s a good habit.”
Commercial Production of English Ivy (Hedera helix L.)

Part II. Culture.

by Bodie V. Pennisi1, Ronald D. Oetting2, Forrest E. Stegelin3, Paul A. Thomas1, and Jean L. Woodward4

1Department of Horticulture
2Department of Entomology
3Department of Agricultural and Applied Economics
4Department of Plant Pathology

This article is adopted from Extension Bulletin 1206, Cooperative Extension Service, The University of Georgia.

Cultural Requirements

Ivy is easy to grow if cultural conditions are right. The light levels depend on the finished product and the intended market. For landscape use, ivy is commonly grown under 50% shade or higher (some nurseries use natural shade from trees.) Hanging baskets for indoor use can be grown under 3000-4000 fc (32-43 klux.) or approximately 70% shade. Recommendations for production of acclimatized foliage plants for interior use are light levels of 1500-2500 fc (16-27 klux.) These light levels are needed to help the plant adjust to the low light frequently encountered in interior environments. However, if the customer places an acclimatized ivy (produced under low light) in direct sun on a porch, foliage burn is likely to result. Therefore, growers should not only select the proper light levels for production of high quality ivies for the different markets, but they should also educate customers to provide the best conditions for plant growth.

Some variegated ivy cultivars loose intensity of color under low light levels. This variegation response depends on the cultivar of ivy, the light levels, and in some cases, the temperatures. Some cultivars that display either white - or yellow - margined leaves lose their variegation when grown under very low light levels. Cultivars that have variegated young growth, e.g., 'Buttercup,' need higher light to keep the bright yellow color. Experiments with H. helix 'Gold Heart,' which has yellow leaf centers, have shown that light levels below 1000 fc (11 klux) cause greening of the yellow variegation (Pennisi and van Iersel, unpubl.) Variegated cultivars are also more sensitive to high light and temperatures, compared to nonvariegated ones.

Ivy does not require high nutrient levels (Tables 3 and 4.) Ivy grows well with N-P-K ratios of 1-1-1, 2-1-2 and 3-1-2. The benefits of using the 3-1-2 ratio are
reduced fertilizer costs per unit of nitrogen and lower total soluble salts. Liquid fertilizers can be applied with each irrigation, weekly, or every other week. Suggested N, P and K levels in ppm for continuous application are 150 ppm N, 50 ppm P, and 100 ppm K. Growers report good results using liquid feed with the formula 9-3-6, which also has micronutrients.

Soil temperatures below 60°F and night temperatures below 65°F will result in slower growth. During winter months, therefore, fertilizer levels can be reduced by half. During high temperature months (85-95°F days and 75-85°F nights) ivy grows rapidly and can use slightly higher fertilizer rates. A good rule that will accommodate cool and warm season ivy production is to reduce recommended fertilizer levels by 25% during December to February and raise them by 25% from the recommended fertilizer levels from June to September.

Table 3. Suggested nutrient application rates for slow-release fertilizer formulations and different pot sizes for English ivy (adapted from Conover, R.T. and C.A. Poole, 1984, Foliage Digest (vii) 8-1-6.)

<table>
<thead>
<tr>
<th>gms¹ 14-14-14/pot/3 months</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 ″ 4″ 1-gal² 6″ 8″</td>
</tr>
<tr>
<td>1.0 2.5 6.5 5.0 10.0</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>gms¹ 19-6-12/pot/3 months</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 ″ 4″ 1-gal² 6″ 8″</td>
</tr>
<tr>
<td>0.7 1.8 4.8 4.2 7.1</td>
</tr>
</tbody>
</table>

1 One level teaspoon = approximately 5 grams.
2 1-gal refers to Full 1 container in the nursery trade.

Table 4. Suggested micronutrient application rates for foliage plants (adapted from Conover, R.T. and C.A. Poole, 1984, Foliage Digest (vii) 8-1-6.)

<table>
<thead>
<tr>
<th>Element</th>
<th>Rate of Application g/m/1000 sq ft/mo</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boron (B)</td>
<td>0.43</td>
</tr>
<tr>
<td>Copper (Cu)</td>
<td>4.33</td>
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<tr>
<td>Iron (Fe)</td>
<td>17.33</td>
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<tr>
<td>Manganese (Mn)</td>
<td>8.67</td>
</tr>
<tr>
<td>Molybdenum (Mo)</td>
<td>0.02</td>
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<tr>
<td>Zinc (Zn)</td>
<td>4.33</td>
</tr>
</tbody>
</table>
Slow release fertilizers with 2 to 12 months release period also can be used. The release rate is usually calculated for a soil temperature near 70°F. During cold months when potting media temperatures are lower, the release rate will be slower. Conversely, during warm months when potting media temperatures are higher, the release rate will be much faster. During propagation, especially toward the end, rooted cuttings benefit from foliar fertilization with a complete soluble fertilizer (100-150 ppm N), which can be delivered two or three times per week through the propagation misting system. Slight rinsing is recommended after foliar nutrient application to avoid possible foliage burn. A medium pH of near 6.0 should be maintained.

Ivy grown in baskets for cutting stock are usually grown for 12 to 14 months before being sold. Nitrogen and potassium have great effect on the vine length and quality. In general, N and K levels between 0.007 and 0.01 oz/6”-pot/mo (2.46 to 3.85 g/pot/yr) will produce the greatest number of cuttings per plant.

Regular testing of the growing medium throughout the crop cycle is recommended to obtain measurements of pH and EC (electrical conductivity) and if necessary, to make corrective steps to ensure that they are in the right ranges. Testing can be done in-house or a soil sample can be sent to a soil-testing lab. Most land-grant universities as well as several private labs offer soil testing for minimal charge. In-house testing can be done using the Pour Thru method, which involves pouring a known volume of water over the medium and collecting the leachate (for more on this technique see www2.ncsu.edu:8010/unity/lockers/project/hortsublab/pourthru/). using a pH/EC meter. Testing is recommended every week for plants in 4” or smaller pots; and every two weeks for larger size pots. For routine analysis a minimum of 5 pots should be analyzed. If the results vary widely, the sample size should be increased. The results should be recorded in pH and EC graphs (available http://www.ces.ncsu.edu/floriculture/ or http://www2.ncsu.edu/hortsublab/), which should be included in the crop’s history record.

In addition to pH and EC information, soil analysis performed by analytical labs also includes levels of individual nutrients in the growing medium. Some soil testing labs also provide recommended concentrations of the individual nutrients. This information can be used to adjust the fertilizer program. The PourThru method determines pH and EC of all the nutrients present in the growing medium, but does not give any information about individual nutrients. Therefore analytical labs may be able to detect potential problems that will not be detected with in-house tests. Soil testing labs generally use the 1:2 dilution method or the saturated medium extract (SME) method. Both methods involve dilution of the samples. Because of this, the EC results from a soil-testing lab are always lower than the EC measured in-house with the PourThru, and the results should be interpreted accordingly (Table 5.)
Table 5. Comparison of EC measured with different methods. There are large differences in the EC, depending on which method is used.

<table>
<thead>
<tr>
<th>1:2</th>
<th>SME</th>
<th>PourThru</th>
<th>Indication</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 0.3</td>
<td>0 to 0.8</td>
<td>0 to 1.0</td>
<td>Very low</td>
</tr>
<tr>
<td>0.3 to 0.8</td>
<td>0.8 to 2.0</td>
<td>1.0 to 2.6</td>
<td>Low</td>
</tr>
<tr>
<td><strong>0.8 to 1.3</strong></td>
<td><strong>2.0 to 3.5</strong></td>
<td><strong>2.6 to 4.6</strong></td>
<td><strong>Normal</strong></td>
</tr>
<tr>
<td>1.3 to 1.8</td>
<td>3.5 to 5.0</td>
<td>4.6 to 6.5</td>
<td>High</td>
</tr>
<tr>
<td>1.8 to 2.3</td>
<td>5.0 to 6.0</td>
<td>6.5 to 7.8</td>
<td>Very high</td>
</tr>
<tr>
<td>&gt; 2.3</td>
<td>&gt; 6.0</td>
<td>&gt; 7.8</td>
<td>Extreme</td>
</tr>
</tbody>
</table>

Tissue analysis should be performed if mineral deficiency or toxicity symptoms develop but also regularly throughout production to obtain information about the crop's nutritional status. When sampling, 30 (large-leaf cultivars) to 40 (small-leaf cultivars) mature leaves from new growth should be collected. Normal foliar analysis ranges are given in Table 6.


<table>
<thead>
<tr>
<th>Macronutrients</th>
<th>ppm</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>2.50 - 4.50</td>
</tr>
<tr>
<td>P</td>
<td>0.25 - 0.90</td>
</tr>
<tr>
<td>K</td>
<td>1.50 - 4.50</td>
</tr>
<tr>
<td>Ca</td>
<td>1.00 - 2.00</td>
</tr>
<tr>
<td>Mg</td>
<td>0.25 - 0.70</td>
</tr>
<tr>
<td>S</td>
<td>0.25 - 0.50</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Micronutrients</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fe</td>
<td>50 - 375</td>
</tr>
<tr>
<td>Mn</td>
<td>50 - 200</td>
</tr>
<tr>
<td>B</td>
<td>20 - 50</td>
</tr>
<tr>
<td>Cu</td>
<td>10 - 25</td>
</tr>
<tr>
<td>Zn</td>
<td>20 - 100</td>
</tr>
<tr>
<td>Mo</td>
<td>50 - 4.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Nonessential Elements</th>
<th>ppm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Na</td>
<td>50 - 500</td>
</tr>
<tr>
<td>Al</td>
<td>10 - 200</td>
</tr>
</tbody>
</table>

When preparing soil samples for a soil-testing lab, remove the upper 1/2” to 1” of the growing medium and then collect a core of the growing medium extending to the bottom of the pot.

Recent experiments have shown that ivy can be grown successfully using subirrigation systems (Pennisi and van Iersel, unpubl.) Subirrigation systems decrease or virtually eliminate chemical runoff from greenhouses. As public awareness of environmental protection increases, growers may be pressured by strict laws and regulations to reduce or eliminate chemical runoff from their operations. In subirrigation systems, benches or whole greenhouse sections are flooded with a fertilizer solution pumped from a holding tank. The fertilizer solution is picked up by the potting medium through a wicking action. After approximately 15 to 20 minutes the fertilizer solution remaining on the bench or the flooded...
floor is drained back into the holding tank, where it is stored until the next fertigation (usually the next day). In addition to environmental benefits, zero runoff systems save labor, water, and fertilizer, and can produce more uniform crops than overhead or drip irrigation. Good quality ivy plants intended for interior use were produced using subirrigation with 100 ppm N, 50 ppm P, and 100 ppm K, and light levels of 1500 fc (Pennisi and van Iersel, unpubl.) Current research is underway to develop detailed guidelines including optimal light levels, fertilizer rates, growing media, and optimal ranges for the leachate EC and pH of the growing medium for production of ivy in subirrigation systems.

To produce an attractive, well-branched plant in a hanging basket, ivy should be pinched once or twice during production. The first pinch is usually done when plants are small and consists of removing the soft new growth as soon as cuttings have rooted and have shown one to two inches of growth. In this pinch, called a “soft pinch,” the tip of the vine and the first node with a recently expanded leaf are removed (Fig. 3a.) For cultivars that branch well naturally, this one pinch may be sufficient to produce a full basket. A second pinch may be necessary for cultivars with less natural branching. At this stage of their growth, the vines may extend several inches from the rim of the hanging basket. The second pinch involves removing the shoot tip and two to three nodes below.

Some growers may choose to start with the second pinch, after the baskets are hung, however; the softer the pinch, the less growth is wasted. When baskets need to be kept in the greenhouse longer, or the first pinch has not produced sufficient branching, another pinch may be necessary. This one is directed towards keeping the vine’s length to the height of the pot’s bottom (Fig. 3b.) How full the basket look also depends on the number of cuttings that were originally stuck in it. Cultivar selection is important to help minimize manual labor; self-branching cultivars require less pinching while trailing cultivars may need more than three pinches to produce a well-branched plant. Cultivars with small leaves may require higher number of cuttings and/or more pinches to produce a full basket, while fewer cuttings may be needed of large-leafed cultivars.

Chemical growth control of ivy with various growth retardants has been used with a varying degree of success (Table 7.) The commercial use of growth retardants on ivy has not been extensive. However, a newer chemical Florel®, has been shown to increase lateral branching and inhibit internode elongation on a wide range of floricultural crops. Recently accepted Florel® label includes ivy. Growth regulators should always be tested on a small group of plants first. Lateral or basal branching and internode elongation (desirable in formation of topiary tree ‘trunks’) is enhanced with two foliar sprays of 300 ppm gibberellic acid (GA3) applied on alternate weeks. Better results are achieved when the gibberellic acid is applied to previously pruned shoots. If the vines are used for propagation, they should be left to reach greater length before being cut.
Figure 3. Pinching patterns for ivy in hanging baskets. Soft pinch (a) can be done by hand or it may require clippers. Later pinch (b) may be needed to keep the vines from becoming too long.

Table 7. Summary of published literature on effects of plant growth retardants on *Hedera* juvenile forms adapted from Henny, R. 1990, CFREC-Apopka Research Report RH-90-10.)

<table>
<thead>
<tr>
<th>Growth Retardant</th>
<th>Method of Application</th>
<th>Amount Used</th>
<th>Degree of Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-Rest</td>
<td>drench</td>
<td>0.25 to 1 milligrams per 6-inch pot</td>
<td>none</td>
</tr>
<tr>
<td>A-Rest</td>
<td>spray</td>
<td>10 to 200 ppm</td>
<td>+</td>
</tr>
<tr>
<td>A-Rest</td>
<td>drench</td>
<td>0.5 to 5 ppm</td>
<td>+</td>
</tr>
<tr>
<td>B-Nine</td>
<td>spray</td>
<td>1,000 to 10,000 ppm</td>
<td>+</td>
</tr>
<tr>
<td>Bonzi</td>
<td>drench</td>
<td>0.5 milligrams per 6-inch pot</td>
<td>slight</td>
</tr>
<tr>
<td>Cycocel</td>
<td>spray</td>
<td>500 to 3,000 ppm</td>
<td>none</td>
</tr>
<tr>
<td>Cycocel</td>
<td>drench</td>
<td>500 to 3,000 ppm</td>
<td>none</td>
</tr>
</tbody>
</table>

1 Slight = 1 to 10% growth reduction. The “+” sign indicates that a positive response to the growth retardants was reported but no numerical data were presented in the original paper.
Commercial Production of English Ivy (*Hedera helix* L.)

Part IV.

**Physiological Problems, Disease and Pest Management**

By Bodie V. Pennisi1, Ronald D. Oetting2, Forrest E. Stegelin3, Paul A. Thomas1, and Jean L. Woodward4

1Department of Horticulture
2Department of Entomology
3Department of Agricultural and Applied Economics
4Department of Plant Pathology

In this last part of the series, we will discuss physiological problems in ivy, disease and pest management.

This article is adopted from Extension Bulletin 1206, Cooperative Extension Service, The University of Georgia.

The most common cultural problems encountered in *Hedera* production are listed in Table 10. Specific recommendations are given for each problem. To avoid possible phytotoxicity problems, growers should evaluate the effects of every pesticide or mixture of pesticides on a few plants under their own environmental conditions.

To best control diseases on ivy, do not overwater or over fertilize plants. Disease spread can be rapid within greenhouses. Remove diseased plants promptly and keep area clean. Practice good sanitation to reduce introduction of diseases into crop production.

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**Endowment Fund**

The American Ivy Society has established an Endowment Fund for the purpose of studying and propagating ivy, ivy education, and promoting the appreciation and enjoyment of ivy.

Contributions may be sent to: AIS Treasurer, David Clark
4105 Crown Hill Road, Jarrettsville, MD 21084

Checks should be made payable to The American Ivy Society. All contributions are tax deductible.

<table>
<thead>
<tr>
<th>Physiological Problems</th>
<th>Conditions</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loss of variegation in young leaves</td>
<td>Insufficient light levels; most common in winter months.</td>
<td>Move plants to higher light location.</td>
</tr>
<tr>
<td>Loss of variegation in older leaves</td>
<td>Observed only in a few cultivars, particularly some of the yellow and green ones Insufficient light levels accelerate this condition.</td>
<td>Choose cultivars with stable variegation pattern.</td>
</tr>
<tr>
<td>Permanent loss of variegation or significant change in leaf shape</td>
<td>One or more shoots on a plant will develop distinctly different leaves than the rest of the plant.</td>
<td>Trim out these shoots; for propagation use only vines with typical cultivar leaves.</td>
</tr>
<tr>
<td>Oedema</td>
<td>Small, irregular-raised corky areas on leaf surface.</td>
<td>Avoid uneven moisture and excess salts in the growing medium.</td>
</tr>
<tr>
<td>Slow growth and rooting of cuttings</td>
<td>Excess salts. Typical in the summer months in the South.</td>
<td>Keep air temperatures below 90°F.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Bacterial Problems</th>
<th>Symptoms and Favorable Conditions</th>
<th>Disease Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xanthomonas leaf spot (Xanthomonas campestris pv. hedera)</td>
<td>Brown to black circular to irregular spots, often with yellow to red halo and a water-soaked margin, found first on the older leaves; stem and petiole cankers may also develop. With heavy infection, the young leaves can be malformed.</td>
<td>Reduce overhead irrigation; use drip irrigation to prevent spread of the pathogen through water splashes. Use only disease-free propagation material. Trim and dispose infected plant material.</td>
</tr>
<tr>
<td><strong>Bacterial and Fungal Management Problems</strong></td>
<td><strong>Favorable Conditions</strong></td>
<td><strong>Symptoms and Disease</strong></td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>--------------------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td>Xanthomonas leaf spot (Xanthomonas campestris pv. hederas) continued</td>
<td>Common on juvenile ivies and on adult forms when overhead irrigation is used; predominate in summer months.</td>
<td>Reduce overhead irrigation, use drip irrigation to prevent spread of the pathogen through water splashes. Use only disease-free propagation material. Trim and dispose infected plant material. Treat with copper hydroxide (kocide, blue shield, champ, champion), copper sulfate pentahydrate (Phyton), or fosetyl aluminum (Alie) to reduce disease spread.</td>
</tr>
<tr>
<td>Botrytis blight (Botrytis cinerea)</td>
<td>Brown to tan lesions on leaves, stems and petioles. Occurs during high humidity and wet conditions. Cankers forming during soil line can kill plants.</td>
<td>Increase air movement to reduce relative humidity, keep foliage dry. Remove heavily damaged plants to reduce spread of the pathogen. Treat with vinclozolin (Omalin 50 WP), copper hydroxide (Kocide) or iprodione (Chipco 25% WP), or azoxystrobin (Heritage) to reduce disease spread.</td>
</tr>
<tr>
<td>Colletotrichum leaf spot (Colletotrichum trichellum) (also called anthracnose)</td>
<td>Brown, sunken lesions on leaves, sometimes with tiny black specks in the centers. Appears very similar to Xanthomonas leaf spot. Common on juvenile ivies and on adult forms when overhead irrigation is used; predominate in summer months.</td>
<td>Reduce overhead irrigation; use drip irrigation to prevent spread of the pathogen through water splashes. Use only disease-free propagation material. Trim and dispose infected plant material. Increase air movement to reduce relative humidity. Treat with copper hydroxide (kocide), manzate (Dithane, Fore), iprodione (Chipco 26019 WP), or azoxystrobin (Heritage) to reduce disease spread.</td>
</tr>
<tr>
<td>Phytophthora root rot (Phytophthora spp.)</td>
<td>Leaf chlorosis, wilting, root die-Back, basal leaves turn brown and curl downward.</td>
<td>Use pathogen-free potting media, pots and plant material. Do not over water or overfertilize plants. Remove infected plants to reduce spread of the pathogen. Treat with etridiazole (Truban, Terrazole), etridiazole + thiophanate-methyl (Baro), or metalaxyl (Subdue Maxx).</td>
</tr>
<tr>
<td>Powdery mildew (Oidium spp.)</td>
<td>White, powdery growth on leaves, petioles and stems. High humidity, poor air circulation and warm days followed by cool nights favor infection.</td>
<td>Remove severely infected plants. Improve air circulation. Treat with propiconazole (Banner Maxx), triadimefon (Strike), or copper sulfate pentahydrate (Phyton 27).</td>
</tr>
<tr>
<td>Rhizoctonia root rot and aerial blight (Rhizoctonia solani)</td>
<td>Brown, irregular lesions develop on the entire plant. Plants may wilt. Blighted leaves may mat together. Entire plants can be blighted and killed. Tan to light-brown hyphae (thread-like fungal growth) can be seen between the soil and the blighted foliage. Common on juvenile ivies and adult forms when overhead irrigation is used; predominate during hot, humid weather. Disease development is rapid.</td>
<td>Use pathogen-free potting media, pots and plant material. Do not over water or overfertilize plants. Remove infected plants to reduce spread of the pathogen. Treat with PCNB (T erraclor), etridiazole + thiophanate-methyl (Baro), or iprodione (Chipco 26019).</td>
</tr>
<tr>
<td>Insect and Related Problems</td>
<td>Symptoms</td>
<td>Insect and Related Pests Management</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>----------</td>
<td>-------------------------------------</td>
</tr>
<tr>
<td>Aphids</td>
<td>Distortion of new growth infestation may not be noticed until castskins, honeydew or sooty mold is observed.</td>
<td>Use pest-free plant material. Use yellow sticky traps to monitor early invasion. Treat with imidacloprid (Marathon), pymetrozyn (Endeavor), cyfluthrin (Decathlon), acephate (Orthene), bifenthrin (Talstar), azadirachtin (Azatin), fenoxycarb (Precision), soap, oil, and neem oil (Triact).</td>
</tr>
<tr>
<td>Mites (broad mite and false spider mite)</td>
<td>Foliar necrosis of new growth; initially new leaves are cupped downward, puckered and have serrated margins; sever leaf drop may occur.</td>
<td>For all mite pests: Use pest-free plant material. Treat with abamectin (Avid), fenpropathrin (Tame), fenpyroximate (Ovation), bifentrazone (Floramite), bifenthrin (Talstar), pyridaben (Sanmite 75 WP), chlorfenapyr (Pylon), endosulfan (Thiodan), soap, oil, and neem oil (Triact).</td>
</tr>
<tr>
<td>Mites (two-spotted spider mite)</td>
<td>Infected plants become yellow or speckled due to the feeding damage; webs become visible when infestations are severe.</td>
<td></td>
</tr>
<tr>
<td>Mites (cyclamen mite)</td>
<td>Infected plants develop 'rat-tail symptom', verification must be made entomologist with a microscope.</td>
<td></td>
</tr>
<tr>
<td>Scales</td>
<td>Weakened or stunted plants; scales are readily distinguished from the plant material they are feeding on.</td>
<td>Use pest-free plant material. Treat with bifenthrin (Talstar), chlorpyrifos (Dursban), imidacloprid (Marathon), acephate (Orthene), kinoprene (Enstar), pyriproxifen (Distance), bendiocarb (Closure), and fenoxycarb (Precision).</td>
</tr>
<tr>
<td>Shore flies</td>
<td>Larvae and adults do not cause direct damage but they may spread plant pathogens and their fecal matter decreases plant value.</td>
<td>Reduce water application to control algae growth. Avoid algae growth on walkways, benches, and cooling pad. Treat with diflubenzuron (Adept), pyriproxifen (Distance), fenoxycarb (Precision), and Steinemema (Skanmask).</td>
</tr>
<tr>
<td>Mealybugs</td>
<td>Stunted growth; honeydew and sooty mold often are present.</td>
<td>Use pest-free plant material. Treat with acephate (Orthene), imidacloprid (Marathon), bifenthrin (Talstar), chlorpyrifos (Dursban), cyfluthrin (Decathlon), kinoprene (Enstar), soap, oil, and neem oil (Triact).</td>
</tr>
<tr>
<td>Insect and Related Problems</td>
<td>Symptoms</td>
<td>Insect and Related Pests Management</td>
</tr>
<tr>
<td>----------------------------</td>
<td>----------</td>
<td>-----------------------------------</td>
</tr>
<tr>
<td>Whiteflies</td>
<td>Infested leaves often have small yellow spots where feeding occurred; with high infestations leaves become yellowed and leaf undersides are covered with sooty mold.</td>
<td>Use pest-free plant material. Use yellow sticky traps to monitor early invasion. Treat with pyrethrum (Xclude), acephate (Orthene), fenoxycarb (Precision), azadirachtin (Azatin), and bendiocarb (Closure), imadacloprid (Marathon), bifenthrin (Talstar), chlorpyrifos (Dursban), cyfluthrin (Decathlon), pyriproxyfen (Distance), Beauveria bassiana (Naturalis), soap, oil, and neem oil (Triact).</td>
</tr>
<tr>
<td>Fungus gnats</td>
<td>Larvae feed on the roots and stems near the soil line; adults do not cause direct damage but can spread plant disease and are cause for complaints by customers.</td>
<td>Reduce water application where possible. Use yellow sticky traps to monitor early invasion. Avoid algae growth on walkways, benches, and cooling pads. Treat with azadirachtin (Azatin), chlorpyrifos (Dursban), kinoprene (Enstar), cyromazine (Citation), fenoxycarb (Precision), diflubenzuron (Adept), pyriproxyfen (Distance), and Steinernema (Skanmask).</td>
</tr>
<tr>
<td>Thrips (Western flower thrips and Banded greenhouse thrips)</td>
<td>Infested leaves become curled or distorted, with silver-gray scars or calloused areas where feeding occurred; thrips can transmit the impatiens necrotic spot virus (INSV).</td>
<td>Use yellow sticky traps to monitor early invasion. Treat with pyrethrum (Xclude), azadirachtin (Azatin), chlorpyrifos (Dursban), and bendiocarb (Closure), abamectin (Avid), spinosad (Conserve), acephate (Orthene), and methiocarb (Mesurol).</td>
</tr>
<tr>
<td>Caterpillars</td>
<td>Holes in the center or along the leaf edge; easy to detect.</td>
<td>Treat with azadirachtin (Azatin), chlorpyrifos (Dursban), spinosad (Conserve), acephate (Orthene), cyfluthrin (Decathlon), bendiocarb (Closure), and Bacillus thuringiensis (Dipel).</td>
</tr>
<tr>
<td>Slugs</td>
<td>Damage similar to caterpillar’s; these pests are nocturnal and can be found feeding at night.</td>
<td>Treat with methiocarb (Mesurol) and metaldehyde (Deadline).</td>
</tr>
</tbody>
</table>

Authors thank Patricia R. Hammer of Samia Rose Topiary, Dr. Sabina M. Sulgrove, Director of Research, American Ivy Society, Dr. Franklin A. Pokorny, The University of Georgia, Mr. Warren Davenport of TimberCrest Farm, GA, and Mr. Richard Davis of The Ivy Farm, VA, for reviewing this bulletin and their helpful suggestions.

Mention of a commercial or proprietary product in this publication does not constitute a recommendation by the authors, nor does it imply registration under FIFRA as amended.
When a new ivy is registered, it is photographed and described in detail in the *Ivy Journal*. This is done in order that the correct name is associated with a specific ivy. In addition, a herbarium specimen is made and deposited in the Willard Sherman Turrell Herbarium (MU), Department of Botany, Miami University, Oxford, Ohio 454045; and in the Claude E. Phillips Herbarium (DOV), Department of Agriculture & Natural Resources, Delaware State University, Dover, Delaware 19901-2277. The letter(s) used in parentheses after the cultivar name refer(s) to the Pierot Classification System (Pierot 1974, 1995) and "Knowing and Growing Ivy" (AIS 1997). Registration numbers are coded. The first two digits refer to the year that the cultivar was Registered. The last two or three digits indicate the sequential numbering during the year that the ivy was received. All new cultivars are presumed sports of *Hedera helix* unless otherwise noted.

'Leprechaun' (AIS 99-011), Figs 1-3, is a Miniature (M), Bird's Foot (BF) ivy in the Pierot Classification System (Pierot 1974, 1995). It was submitted for Registration (Registration Number 0399011) by Rosa Capps of Stone Mountain, Georgia 30083. She obtained it from Vine Acres Nursery, Inc., Clarcona, Florida 32710, in March 1999 under the name 'Mini-Needlepoint', Figure 1, which was the name under which Vine Acres had been selling this ivy for about a year. This miniature ivy was temporarily referred by AIS as 'Mini-Midget' because of its small leaves, and because 'Midget' (see Sulgrove 1981a) is a small version of 'Needlepoint'.

Capps received permission from Vine Acres to register this cultivar as 'Leprechaun' (Davis 2001).

It turns out, however, that 'Leprechaun' is really a miniature (M) form of 'Irish Lace' (see figure 4; also Sulgrove 1981b). 'Leprechaun' has the star-like (BF), narrow-lobed, flat, thick, shiny, dark green leaves of 'Irish Lace', only smaller. Like 'Irish Lace', the terminal lobe of 'Leprechaun' is elongated, almost linear, mostly 4 to 6 times as long as wide. The lateral lobes are long, about 1/3 to 1/2 the length of the terminal lobe, and the leaf margins of mature leaves, especially noticeable on the terminal lobes, are rolled under. When 'Leprechaun' is grown outdoors the leaves (Figure 2) are larger than when pot-grown...
(Figure 3).

**Sources**

‘Leprechaun’ is available from Hedera etc. P.O. Box 461, Lionville, PA, 19353, or hedera@worldnet.att.net.

**Literature Cited**


Figure 1. Pot of ‘Leprechaun’ from Vine Acres Nursery, Inc, Clarcona, Florida, 32710. Note the compactness of the plant. But even the narrow, rolled under lobes are visible. It was called ‘Mini-Needlepoint’ by Vine Acres.
New Registrations 2003. *Hedera helix* 'Leprechaun' (M, BF) (AIS 99-011; Registration Number 0399011). Figure 2. Like 'Irish Lace', 'Leprechaun' has dark green, flat, shiny leaves with very narrow, elongated lobes, but the leaves are smaller and the plant is more compact and self-branching than 'Irish Lace' (See Fig 4). The terminal lobe is very narrow, almost linear, and on fully-expanded leaves the rolled-under margin can be seen and felt.


Figure 3. This is a life-size scan of the compact stems from pots of AIS 99-011 grown in a greenhouse in Eastern Pennsylvania. Although the leaf size is similar, the plants are more compact, with the leaves closer together than when the same plant (clone) is grown outdoors (see Figure 2). The rolled-under margin is visible in the individual leaves.


Figure 4. Life-size 'Irish Lace', photographed under glass. The leaves of 'Irish Lace' are identical in shape to 'Leprechaun' (Figure 2 and 3), but they are larger, and are not as closely spaced. In addition, the petioles of 'Irish Lace' are longer, as long as the blade or longer.

Life-size photo of greenhouse specimens, under glass. Black and white photo by Dave Whitley and Sabina Sulgrove, August 13, 1981.
H. h. 'Irish Lace'
2003 OLDIES BUT GOODIES I.

**HEDERA HELIX**
‘GREEN FINGER’, (BF)
‘PARSLEY CRESTED’, (C)
‘PIXIE’, (M, BF) AND ‘PLUME D’OR’ (BF)

By Sabina M. Sulgrove, PhD, AIS Taxonomist

All the following Ivies are registered by request of Jim Maddux, Heritage International, LLC, 700 Fairway Drive, Camarillo, California 93010.

All stock came from the American Ivy Society Standard Reference Collection and is identified by AIS Accession/Stock/Tracking Numbers.

All cultivars mentioned are presumed sports of *Hedera helix* unless otherwise noted.

In the department "Oldies But Goodies" some of the popular or older varieties deserving of wider recognition — or more precise descriptions — are photographed and described.

When an ivy is registered, it is photographed and described in detail in the *Ivy Journal*. This is done in order that the correct name is associated with a specific ivy. In addition, a herbarium specimen is made and deposited in the Willard Sherman Turrell Herbarium (MU), Department of Botany, Miami University, Oxford, Ohio 454045; and subsequently in the Claude E. Phillips Herbarium (DOV), Department of Agriculture & Natural Resources, Delaware State University, Dover, Delaware 19901-2277.

The letter(s) used in parentheses after the cultivar name refer(s) to the Pierot Classification System (Pierot 1974a, 1995) and *Knowing and Growing Ivy* (AIS 1997).

Registration numbers are coded. The first two digits refer to the year that the cultivar was Registered. The middle pair of digits refers to the year the ivy was first received. The last two or three digits indicate the sequential numbering during the year that the ivy was received.
Green Finger (BF) (AIS 86-134), Registration Number 0386134; Fig. 1. 'Green Finger' is a Bird's Foot (BF) Ivy presumably found in the 1960's by Willie O. Freeland, Garden Spot [Nursery], 4032 Rosewood Drive, Columbia, South Carolina, in his garden, reportedly as a sport of 'Star'. Although it was described for the first time by Freeland in 1971, it is possible that it was distributed by him up to 10 years earlier. A voucher specimen is deposited at the US National Arboretum, Washington, DC. The new terminal leaves are long-tapering, and usually unlobed, about 5 to 7 times as long as wide, or frequently with a rounded, "ear-lobe"-like basal lobe on one or both sides. Older leaves farther down the stem sometimes have a lateral lobe about 3 times as long as wide and opposite the "ear lobe." The margins are slightly rolled under. The plants are very self-branching. 'Green Finger' has been seen to sport to 'Plume d'Or' when grown outside in Dayton, Ohio. 'Green Finger' is also described and illustrated by Heieck (1980a, 1987a). AIS stock (AIS 86-134) was received from Patricia Hammer at Longwood Gardens in 1986; this Longwood stock (LG 760894) came from the originator, Willie Freeland, Garden Spot [Nursery], Columbia, SC in 1976.

Oldies But Goodies, I. Figure 1. Hedera helix 'Green Finger' (BF) (AIS 86-134; Registration Number 0386134). 'Green Finger' has new leaves that are long-tapering, usually unlobed, about 5-7 X as long as wide. Older leaves may have one or two, rounded, "ear-lobe"-like basal projections, or even a narrow, pointed lobe opposite an "ear-lobe." Leaf margins are slightly rolled under.

Life-size scan of vines from outdoor basket from southern California (Camarillo), by Sabina M. Sulgrove, November 2002.
‘Plume d’Or’ (BF) (AIS 79-084) Registration Number 0379084; Fig. 2.
This Bird’s Foot (BF) Ivy, AIS 79-084, came to the American Ivy Society Research Center from Willie O. Freeland, Columbia, South Carolina, between 1975 and 1978. It appears to be a larger, looser form of ‘Irish Lace’ (See Sulgrove 1981), but lacks the thick leaves and shiny, dark green color of ‘Irish Lace’, and the terminal lobe of ‘Plume d’Or’ is not as narrow. ‘Plume d’Or’ is recognized by the rolled-under margins, and the elongated, tapering terminal lobe that is mostly 1.5 to 3 times as long as wide, with the long lateral lobes about a third to 2/3 as long as the terminal lobe. The lateral lobes are often nearly at right angles to the terminal lobe. ‘Plume d’Or’ has sported to ‘Tripod’ (See Sulgrove 1995) and to 'Egret' (See Sulgrove 1999b).

The date of origin of this cultivar is unknown, although Bess Shippy mentions the cultivar in her unpublished manuscript, (which she donated to the American Ivy Society in the mid-1980’s) as being popular in England. [It is unlikely that ‘Plume d’Or was well-known in England, since British authors Peter Q Rose (1980a), and Hazel Key (1999a) do not mention ‘Plume d’Or’; and Fearnley-Whittingstall (1992a) and Rose (1996a) have no information about the history of this cultivar]. The earliest mention of ‘Plume d’Or’ appears to be by Suzanne Pierot in her Ivy Book (1974b), simply indicating that this cultivar is a large 'Irish Lace'. Pierot (2003) recalls that her specimens came in the mid-1970’s from Mary Ellen Ross, Merry Gardens, Camden, Maine 04862. The name is French for "feather of gold." Presumably, the gold color refers to the light green, new leaves that form laterally along the stem, but this new growth in 'Plume d'Or' is certainly not gold!

‘Pixie’ (M, BF) (AIS 88-233) Registration Number 0388233 (Synonym [Later name for the same cultivar]: ‘Margaret’ (Heieck 1980b, 1987b; AIS 79-235); Fig. 3.'Pixie' (AIS 88-233) is an old, American cultivar, first mentioned by Bess Shippy (1951) as having been introduced by E. H. Barcafer, of Springfield, Ohio. It is a small (M), Bird’s Foot (BF) ivy with 5 (to 7), narrow, forward-pointing lobes and a prominent, pale green vein bisecting each lobe. The terminal lobe is about twice as long as the lateral lobes, and the laterals are about 1.5 to twice the length of basal lobes. The tip of the terminal lobe is more or less pointed, and the lateral and basal lobes are rounded. The leaves are closely spaced, and the plants are very self-branching. ‘Pixie’ has sported to 'Lilliput' (See Sulgrove 1983); and in the AIS Collection it has reverted to 'California'.

The American Ivy Society Research Center received 'Pixie' (AIS 89-060) in 1989 under the name 'Pixie-Dixie' from a garden center carrying Hermann Engelmann Greenhouses, Inc. Star-ling line of plants. The plant is still listed by Engelmann today under the Exotic Angel Brand® (Engelmann 2003). The American Ivy Society's stock of 'Pixie' (AIS 88-233) came from Longwood Gardens, Kennett Square, Pennsylvania, in 1988. Longwood in turn received
'Pixie' (LG 670890) from North Carolina State University in 1967. AIS also received 'Pixie' (AIS 79-235) as 'Margaret' from Longwood Gardens (LG 670892) between 1975 and 1979.

‘Parsley Crested’ (C) (AIS 95-359) Registration Number 0395359; Fig. 4. This stock of 'Parsley Crested' (AIS 95-359) came to the American Ivy Society as named from Allen Haskell’s Nursery, New Bedford, Massachusetts, in 1995. It matches the description of an ivy Bess Shippy (1950a) called "My Crested Ivy": She described this ivy: "This is a very unusual and attractive ivy with leaves averaging about an inch in diameter, all prettily frilled." The distinguishing features of AIS' 'Parsley Crested' are the small-to-medium-sized leaves that are a little longer than wide, light to medium green, with tightly crimped and stretched leaf margins that often bear excess lumps of tissue (excrescences). Sometimes an excrescence develops into a tiny leaf at the base of the blade where the leaf stalk is attached. The crimping is so pronounced that not only are the margins fluted with portions overlapping, but also the entire blade is curly and the broad, shallow lobes are not very obvious. Also AIS' stock of
'Parsley Crested' (AIS 95-359) is very self-branching, [contrary to Bess Shippy's earlier remarks (1950a) ], whereas 'Curly Locks' is not self-branching. In addition, compared to 'Curly Locks, 'Parsley Crested' is a more compact plant, has frillier leaves, and the petioles are shorter, less than 3/4 the length of the blade. The name 'Crispa' (Heieck 1980d, 1987d) has also been associated with 'Parsley Crested'.

'Parsley Crested' is correctly described and illustrated by Heieck (1980c, 1987c), but the photo in Rose1980b, 1990, 1996b) is closer to 'Curly Locks'. Fearnley-Whittingstall (1992b) and Key (1999b) have 'Curly Locks' and 'Parsley Crested' reversed.

**Sources**
The above-mentioned Ivvies are available from Heritage International, LLC., and Seaview Nursery, Inc., Samia Rose, and Hedera etc. Addresses are listed in the ads referred to in the sponsor's index.

**Literature Cited**
'Oldies But Goodies. I. Figure 4. *Hedera helix* 'Parsley Crested' (C) (AIS 95-359; Registration Number 0395359). AIS' stock is very self-branching, with small to medium-sized, very curly leaves with tightly crimped and fluted margins with excess lumps of tissue on the edge. It is a much more compact plant with curlier leaves than the cultivar 'Curly Locks'.

size scan of vines from outdoor basket from southern California (Camarillo), by Sabina M. Sulgrove, November 2002.


Shippy, Bess. [1985]. Unpublished manuscript on ivies. Donated to American Ivy Society, about the mid-1980s. [Time frame when manuscript was written is unknown.]


In the department "Oldies But Goodies" some of the popular or older varieties deserving of wide recognition — or more precise descriptions — are photographed and described. The initial(s) given in parentheses after each cultivar refer(s) to the Pierot Classification System (Pierot 1974a, 1995; American Ivy Society 1997).

‘Curly Locks’ (C) (AIS 79-103); Fig. 1.
The American cultivar, 'Curly Locks', has been confused in the European trade with a second American cultivar, 'Parsley Crested'. Curly Locks' is first mentioned and briefly described from a photo by Bess Shippy in 1950. She indicates that 'Curly Locks' is a 1950 introduction of the, Somerset Rose Nursery, Inc., New Brunswick, New Jersey, which had been selling it in limited quantities "for several years earlier." In addition, the name 'Curly Locks' [often spelled 'Curlilocks'] was also inadvertently applied to 'Manda Crested ' (See Sulgrove 1985a, b) when that cultivar was introduced into Europe and Britain [no date given] (Rose 1980b). The use of the name 'Curly Locks' (and its various spellings and combinations with Cristata) and 'Parsley Crested' is so intertwined in the literature that a listing of who used which name for which cultivar will require more study and documentation. One example of a reversal of names and descriptions is Nannenga-Bremekamp (1970) where the description and illustration of 'Curly Locks' is actually 'Parsley Crested', and vice versa. Also Fearnely-Whittingstall (1992) and Key (1999) have 'Curly Lock's and 'Parsley Crested' reversed. Peter Rose (1980a,1996a) does not mention 'Curly Locks', but his photo of 'Parsley Crested' (1980c, 1996b) is similar to 'Curly Locks'.

'Curly Locks' (AIS 79-103) has large dark green, shiny, curly leaves, with 5-7 short, wide lobes that are fluted and crimped along the margins. The veins are conspicuous, a lighter green. The petioles are long, as long or longer than the blade, often 2 or more inches long, and stand up (are vertical) even when the vines are horizontal. 'Curly Locks' differs from 'Parsley Crested' in having larger, less curly leaves that are not as tightly fluted on the margins, and lacks the extra lumps and bumps (excrescences) of 'Parsley Crested'.
Pierot (1974b) has a photo of 'Curly Locks' with its long petioles and leathery, dark green leaves. 'Curly Locks' is also photographed in the American Ivy Society Ivy Journal (Sulgrove 1999).

The American Ivy Society Research Center received 'Curly Locks' (AIS 79-103) from an undocumented source between 1975 and 1979.

**Literature Cited**


Belmontiana: Miscellaneous Papers of the Landbouwhogeschool ( Wageningen, the Netherlands) 6: 195-212.


Oldies But Goodies. II. Figure 1. *Hedera helix* 'Curly Locks' (C) (AIS 79-103). This cultivar is larger, more open, and less frilly than 'Parsley Crested', with which it has often been confused, especially in Europe. The fluting and crimping of the margins is confined to the margins itself, but without the excrescences (lumps of excess tissue) found in 'Parsley Crested'. The petioles are as long as the blade or longer; and stand upright.

2003 OLDIE BUT GOODIES III.

**HEDERA HELIX**

‘ARDINGLY’ (M, V, I), ‘EVA’ (V, BF), ‘ITSY BITSY’ (M, BF), ‘MINI-ESTER’ (M, V, BF), and ‘MINTY’ (M, I)

By

Russell A. Windle, Registrar

All the following ivies are registered by request of Jim Maddux, Heritage International, LLC, 700 Fairway Drive, Camarillo, California, 93010, and Seaview Nursery, Inc, 1385 Anderson Lane, Santa Barbara, California, 93111

All Stock came from the American Ivy Society Standard Reference Collection, and is identified by AIS accession/Stock/Tracking Numbers.

All cultivars mentioned are presumed sports of *Hedera helix* unless otherwise noted.

The letter(s) used in parentheses after the cultivar name refer(s) to the Pierot Classification System (Pierot 1974a, 1995) and *Knowing and Growing Ivy* (AIS 1997).

‘Ardingly’ (M, V, I) (AIS 88-017), Registration number 0388017: Fig. 1.

‘Ardingly’ (Rose 1980a, 1996a) (Key 1999a) is a miniature, variegated, ivy-ivy (M V I) found by Hazel Key of Fibrex Nurseries, Ltd, in the 1960’s in a garden in Ardingly, Sussex. The leaf shape and color are similar to ‘Glacier’ (See Shippy 1950a), but about half the size, and shorter jointed.

This small, compact, self-branching ivy has three to barely five lobes, is about as long as wide, with a cordate base. The color is gray streaked with green-gray, and an irregular white margin. The variegation is light-stable, like ‘Glacier’, the white margin, does not fade in the shade. Under cooler temperatures, a pink blush can be seen in the white margin. Winter hardiness has not been tested. Because of its small size and self-branching habit, this ivy is a good choice for pots, baskets, and small topiaries.
‘Eva’ (V, BF) (AIS 82-185, 88-201), Registration number 0382185: Fig. 2

‘Eva’ (Van de Laar 1965) is a variegated Bird's Foot (V, BF) ivy from Denmark, which has been around since the 1960’s. The origin of this ivy is unknown, but because of the leaf shape, which is similar to ‘Pin Oak’, Van de Laar (1965) assumes that this was a mutation from ‘Pin Oak’. Peter Q. Rose (1980b, 1996b), stated that ‘Eva’ is a selection from 'Harold'. Eva is often mislabeled as ‘Variegated Needlepoint’ in the trade.

Leaves are small to medium in size, with mainly three forward-pointing lobes, but on occasion, especially during rapid growth, two extra basal lobes can be found. The terminal lobe is up to twice the length of the lateral lobes, and the
leaf is about as wide as long. The color is gray to green-gray with an irregular creamy-white margin. The variegation is light sensitive, meaning that this ivy needs good light to show its variegation pattern. If grown in low light, the variegation pattern will fade to nearly all green. Once returned to good light the new growth will again show the variegation, but the faded leaves will not turn.

‘Mini-Ester’ (M,V,BF) AIS (88-047) Registration number 0388047: Fig 3

‘Mini-Ester’ (Heieck 1980b, 1987b) is a Miniature, Variegated, Bird’s Foot ivy introduced by Frode Maegaard, Ringe, Denmark, around 1980. Leaf shape is similar to ‘Eva’, but smaller in all respects. Normally, ivy names that are made up by the addition of words to an already established cultivar name are not accepted. But in this case, because the name is already well-established in the trade, it would lead to unnecessary confusion to change it – even though it is not a miniature version of the 5-lobed ‘Ester’.

Leaves small, three forward-pointing lobes, with a rounded base. This ivy differs from ‘Eva’ as being about half the size and the lobes are much narrower. Fig 4. The variegation is light sensitive, needing good light to show the best variegation. Color is gray to gray-green, with a cream to white irregular margin. Very self-branching and short jointed, making a good pot plant.

‘Mini-Ester’ has been observed to revert to the 5-lobed ‘Ester’ (Shippy 1985b).
Oldies but Goodies III Figure 3 Mini-Ester (M,V,BF) AIS (88-047) Registration number 0388047 is a miniature, variegated bird’s foot ivy with three forward pointing lobes. Color gray to green-gray with creamy to white irregular margin.


Oldies but Goodies III Figure 4 A comparison of Eva (88-201) left, and Mini-Ester (88-047) Eva is twice the size of Mini-Ester, also the lobes are broader, and leaves are space out farther on the stem.

Life-size photo of greenhouse stock, Encinita, California. By Rachel Cobb, June 2003
These reversions should be removed, as they are different from ‘Mini-Ester’.

‘Itsy Bitsy’ (M, BF) (AIS 94-030) Registration number 0394030: Fig 5

‘Itsy Bitsy’ (Pierot 1974b) is a Miniature Bird’s Foot (M, BF) ivy, which was introduced by Merry Gardens, Camden, Maine (Shippy 1985a), as a sport of ‘Needlepoint’ (date of introduction is not given). Heieck (1980a, 1987a) felt it was a miniature selection of ‘Pin Oak’.

The leaves are small, mostly less than one inch in length, three bluntly pointed lobes, with the terminal lobe twice as long as the laterals. Occasionally there will be two basal lobes. The vines are very self-branching and short jointed. The color is medium green, with lighter veins. Makes a very full pot or basket.

‘Minty’ (Synonym [In this case, and an improper name for the same cultivar]: Mint Kolibri) (V, I) (AIS 94-097) Registration 0394097: Fig. 6

‘Minty’ (Rose 1996c) (Key 1999b) is a Variegated, Ivy-Ivy (V, I), introduced by Frode Maegaard, of the Danish Maegaard Hedera Nursery in Ringe, in 1986 under the name ‘Mint Kolibri’. ‘Kolibri’ is a name wrongly applied in the trade to ‘Schaefer Three’. ‘Minty’ appears to be similar to ‘Schaefer Three’, but with added areas and patches of lime-green coloration. In addition, because the adding of words to an existing cultivar name is not recommended, Peter Rose suggested shortening the name to ‘Minty’ (Whitehouse 1994).

Leaves are medium-sized, about as long as wide, with three to barely five lobes,
and a cordate base. The terminal lobe is up to twice the length of the lateral. The most outstanding feature of this ivy is the lime-green or mint-green coloration. Variegation pattern is an irregular band of lime-green on the margins intruding toward the center. Next is an irregular section of white, and the center is gray-green, with splashes of the lime-green. Plants are self-branching and make long runners.

Sources
The above-mentioned ivies are available from Heritage International, LLC, and Seaview Nursery, Inc., Samia Rose, and Hedera etc. Addresses are listed in the ads referred to in the sponsor’s index.

Literature Cited


Shippy, Bess. 1985a. ['Itsy Bitsy']. p.205. In an unpublished manuscript on Ivies. Donated to the American Ivy Society, about the mid-1980's. [Timeframe when manuscript was written is unknown].
Shippy, Bess. 1985b. ['Ester']. pp.170-171. In an unpublished manuscript on Ivies. Donated to the American Ivy Society, about the mid-1980's. [Timeframe when manuscript was written is unknown].
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TIPS FOR BETTER PICTURES IN YOUR OWN BACKYARD

By
Rachel Cobb
Photographer

EDITORS NOTE:
Rachel Cobb has been taking photographs most of her life. Her career in photography has extended more than 20 years. After spending the first several years of her professional life in New York City she has moved her business to a small farm that has been in her family for three generations. While continuing her work as a graphic artist and photographer she has also been developing flower, fruit and vegetable gardens with a wide range of plants and especially ivies. Her farm, Weedy Acres, is one of The American Ivy Society designated hardiness test sites including over 250 different ivy cultivars. Rachel has been the AIS Editor for over 12 years producing all of its publications. Also, she is the official AIS photographer and documents most of our events big and small.

In this article Rachel shares with us tips for looking at your own backyard through the eyes of the camera. Sharing her years of experience and outstanding talents we can learn to take better pictures in the garden. She reminds us that the tips and general information that follow will work on any subject, not just ivies.

1. FILM AND CAMERAS

FILM
When photographing in the garden use the tightest grain film such as 100 or 200 speed film. This really only matters for large blow ups and close up work. Less grain looks sharper. Film with 400 or 800 speed is more grainy but okay for general use. Film speed determines how fast or slow the shutter in the camera opens and closes letting just the right amount of light in to make an image on your film. Higher the number is the faster the shutter speed, also called the ISO (International Standards Organization).

Kodak brand film looks slightly pink and is best used for people and general-landscapes. Fuji brand looks slightly green, and good for garden shots and close ups of plants. Both are generally good for the average use. Since film can vary you should to test other brands to see what works for your needs.

Negative film works best for most people. If you like to use your images on the computer; a CD disk is a great way to store and protect your photos. Negatives age and get scratched over time, a CD normally will not. Ask for a CD at the time of processing. If you need slides from your negatives, Kodak
will make slides, just like ordering a print. Usually slides are sent to the lab for process and it takes longer so plan ahead.

The lot number or emoultion number is usually found by the expiration date or develop by date. Each manufacturer has their own way of doing it.

TRAVEL TIPS
Before going on a big trip where you plan to take a lot of pictures, test a roll of film before leaving. Then buy that lot number so your pictures will process more or less the same. Film can vary from lot to lot. Same with processing, you want to ask the developer when they last changed their chemicals last and make sure you get in at the start of a new processing run. Good places will keep them changed regularly, but some are lazy and wait too long and your pictures will not have the same clear color, and get a soft foggy look.

IMPORTANT NEW INFORMATION!
DO NOT put your film in your checked luggage! You must carry all your film with you. If you have film higher than 400 IOS, it must be hand checked. No matter what, you should ask questions at check-in and at security because things keep changing. The new X-ray machines will damage checked film. Most of the time there are no signs and no one tells you unless you ask. So ask! This advice stands for exposed film too. They will not hand check film under 400 IOS as it remains unaffected by X-ray machines. Film over 400 IOS can be damaged.

CAMERAS
Throw away cameras are not great for details. You need to be 4 feet away from the subject. Color is harsh and they tend to expose on the dark side when not using the flash. They have a limited exposure range. The flash is not pretty outside on plants. They are great in a pinch for casual use but not the best for your flowers. Buy or borrow a good camera.

Snap and shoot cameras have a 2-4 feet focus range from the object. Many have zoom features that can be helpful. Most don’t allow for manual exposure, so you need to spend time learning the camera and it’s focus point for exposure. This is also true of many digital cameras. Every camera also has it’s own color. This results from the glass the lens is made from. You will only see a difference if you shoot with different lens at the same subject. It can be only slightly different but certainly distinctive to the trained eye.

SLR (Single Lens Reflex) 35mm cameras will give you more professional choices. Invest in a long lens 70-300 or 70-210, preferably with macro focus, and a close up macro lens. 50mm is good if you want to get more serious about plant photography.
A standard lens is about 28-80, this is handy and normally comes in many camera kits. The focus range you will be using is generally about one foot or less, some are just inches from subject, so check the focus range before purchasing. All brands and lens are different so find a good camera store and do your homework there.

Digital cameras are still relatively new. The high end professional digital SLR’s are thousands of dollars. Most people will be happy with a medium priced camera, $500 or less. They even make a throw-a-way now. They are best for internet use and standard 4 x 6 size prints. Some of the digitals will give you a blow up size guide range. Look for that information. The more pixels it offers, the better the camera. You get the best plant images using film or slides if you intend to make prints for gifts or for your wall larger than 4 x 6, unless you have a professional digital with at least 8 mega pixels. This is a ongoing new topic and changes daily. Choose what is best for you.

2. LIGHT

BEST LIGHT
The best light for close up work, is an overcast day bright enough to shoot without flash. You will have a even light instead of hard shadows.

On a sunny day, the best time is early morning and one hour before sunset. The light is warmer and softer. In the mornings you also can take advantage of any dew or frost.

FLASH
Don’t use flash outside with plants, it alters color and gives a harsh look. ONLY use flash to shoot a plant label or just to document a item. If your flash keeps popping up or on, turn it off and shoot manually. Inside using flash, try to have your object as far away from a wall as you can eliminate that hard shadow behind your subject. This works for people too.

A blade of grass is disturbing in this view.

With the blade of grass moved the view is much nicer.
3. READY, SET, SHOOT

LIGHTING
Pay attention to the lighting in your yard year round. Know where the sun is best in the morning and afternoon. Watch your plants so you know when they are at their peak and be ready for the right light.

EXPOSURE
When shooting manually look for the most medium lighted area near where you are shooting and take a reading there. Use that setting for both darker subjects as well as brighter subjects. For example, if you are shooting a white flower close up, your meter reading, will over compensate and your photos will be too dark, so by using the medium setting you will trick the camera and get a perfect photo. A few dark plants will make the meter in the camera over expose. Photographing sand or snow can create similar problems but using the same technique of setting the camera at medium will compensate and result in a much better picture.

With bright or dark images, take a manual exposure reading in medium lighted area and use that reading for the extreme area. Your exposure will be perfect.
STYLING

Don’t be afraid to move things around to make a better picture. Add interesting objects or use unusual planting containers, to make it more exciting. Look at garden magazines and books to see how they style photos. A favorite trick of mine when taking pictures of flowers or grasses if I don’t like the arrangement or a leaf is in a poor position, I just blow across the plant to move it naturally or lightly shake the stem to make things fall in a new place. It will looks natural and not arranged by you.

Hedera helix ‘Henriette’ in a old berry picking pail.

COMPOSITION

Take your time to frame the picture through the camera lens before snapping the shutter. Look for anything disturbing that distracts from the subject such as plant markers or labels. This is also part of the styling process. Bright spots behind a detail can ruin the final image, so move slightly left or right or up or down to change the background. A dark background is best for close ups. Do not use a cluttered or busy background. Keep it simple.

Look at where you focus. Take more than one shot if you can’t decide where the main focus should be positioned. With practice and many rolls of film, you will learn what is working for you. Each frame could be good for different reasons.

Try different angles as well, don’t just stand up, sit down, lay down, look up. And look behind a flower or leaf, not just head on. When walking through your garden, look back to where you have been, not just where you are going. The best shot of all may be right behind you!
The pears in the sample above were taken within 20 minutes of each other. Just by waiting a short time a cloud moved in and eliminated the light patterns behind the pear. When you look at the pear you see the pear and are not distracted by the dancing background. You could also try changing your angle to get a change in the background if waiting for a cloud is not in the time frame you have.

Below is the under side of a Dandelion going to seed. Take a different look at the flowers and weeds in your own back yard by changing your vantage point.
**WEATHER ELEMENTS FOR INTEREST**

*Hedera helix 'Walthamensis' late fall on a very early frosty morning.*

**SHADOWS CAN BE A FEATURE**

This kitty is what first caught my eye in the wheel barrow, but on a second look the shadows of the leaves are what makes this a special photo and not just another cat photo. Don’t be afraid to experiment with light and shadows.
I look at flowers and leaves in every possible angle to get the ultimate photo of that plant. I have looked at this Queen Annes Lace in every way, from bud to snow on the tip of a dried flower.

HAVE FUN AND EXPERIMENT

Crocus bloom from a bed of ivy, in early spring. With an insects eye view through the ivy leaves and early morning sun, a different and fun perspective is discovered.

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Dodds Greenhouses
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Evergreen Nursery
1220 Dowdy Rd., Athens, GA 30606
1-800-521-7267

ForemostCo., Inc.
8457 NW 66th St., Miami, FL 33166
1-800-421-8986

GARDENWORKS
P.O. Box 216, Markleeville, CA 96120
(530) 694-2515

Gilson Gardens, Inc.
P.O. Box 277, 3059 N. Ridge Rd.
Perry, OH 44081
216-259-4845

Hedera etc.*
P.O. Box 461, Lionville, PA 19353-0461
610-970-9175

Heritage International
700 Fairway Dr., Camarillo, CA 93010
805-484-5256

Hobbs Farm & Greenery
979 Barnestown Rd., Hope, ME 04847

Hobby Greenhouse Association
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Mary’s Plant Farm & Landscaping
2410 Lanes Mill Rd., Hamilton, OH 45013

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Section 102, P.O. Box 025289
Miami, FL 33102-52

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140 Soule St., Athens, GA 30605-3624

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* Web site sponsor
BEHOLD THE IVY

By

Dave Headley, Director
Buffalo & Erie County Botanical Gardens
Buffalo, New York

After years of gathering, the Buffalo & Erie County Botanical Gardens is now home to a magnificent collection of ivy. “Ivy” you may say. “So, what!” Actually, ivy is the single most versatile plant in horticulture.

Among all its varieties, ivy can be grown in all 50 States and in nearly all countries of the world. It can grow in full sun to full shade and can tolerate a wide range of soils. Ivy can be grown as a groundcover, a wall cover or a hedge, or as a shrub, a small tree, a bonsai, or as a topiary. It can be grown in the landscape or in the house and can be used in flower arrangements and can even be used as an herb. Nothing else beats it!

All true Ivies belong to the genus Hedera. There are just over 500 varieties of ivy and the Buffalo & Erie County Botanical Gardens has nearly every one. According to Pat Hammer, Board Member of the American Ivy Society, we are the Botanical Garden with the largest collection of ivy in the world!

We on the Scientific Advisory Committee have decided to integrate ivy into almost every house of the Conservatory. After all, it is SO versatile. But because we exhibit the largest number of Ivies in House 9, we will now call this house “The Ivy House.” Even so, the ivies in House 9 constitute only a tiny sample of all the kinds of IVY we have in our collection. The bulk of our collection is housed in the large greenhouse off the back garage.

English ivy, H. Helix, has by far the most varieties, well over 400 in all. Most are the result of “sporting” in which a shoot grows off a plant that has leaves that are distinctively different than the rest of the plant. Ivy classification includes variegated kinds, bird’s-foot and heart-shaped leafed types, ruffled and fan-leaved ones, miniatures, arborescent types, the oddities and, of course, the typical ivy Buffalo ivies.