#### Abstract

Mara Friedland. THE CURATIVE BLOOM: AN INVESTIGATION OF MEDICINAL BOTANICAL IMAGERY INCORPORATING PRECIOUS METALS AND ENAMEL AS BODY ADORNMENT. (Under the direction of Linda Darty) School of Art and Design, East Carolina University, December 2009.

This written report supports the creative thesis entitled *The Curative Bloom.* The historical exploration of the medicinal uses of plant life, along with a technical investigation of casting, forming and enameling processes, cumulates in a creative body of jewelry work focusing on healing herbs and their correlation to the body.

#### The Curative Bloom:

# An Investigation of Medicinal Botanical Imagery Incorporating Precious Metals and Enamel as Body Adornment

A Report of Creative Thesis

Presented to

The faculty of the School of Art and Design

East Carolina University

In Partial Fulfillment

Of the Requirements for the Degree

Master of Fine Arts in Metal Design

By:

Mara Friedland

December 2009

### THE CURATIVE BLOOM:

# AN INVESTIGATION OF MEDICINAL BOTANICAL IMAGERY INCORPORATING PRECIOUS METALS AND ENAMEL AS BODY ADORNMENT.

_	
D٠,	
DΥ	

### Mara Friedland

APPROVED BY:	
DIRECTOR OF THESIS:	
	Linda Darty
COMMITTEE MEMBER:	
	Robert Ebendorf
COMMITTEE MEMBER:	
	Christine Zoller
COMMITTEE MEMBER:	
	Mi-Sook Hur
DIRECTOR OF THE SCHOOL	
OF ART AND DESIGN	Michael H. Drought
DEAN OF THE GRADUATE SCHOOL	
	Paul Gemperline,PhD

#### **ACKNOWLEDGEMENTS**

Thank you to all that have helped me pursue my "personal legend" of becoming a jeweler and metalsmith. Without the support and love of my family and friends this would have been a challenging journey. Mom, Dad, Katie and Elliot; your encouragement and love have been invaluable during this process. Thank you for the compassion, "spring break scholarships" and encouragement. Thank you to my amazing thesis committee Linda Darty, Bob Ebendorf, Mi-Sook Hur and Christine Zoller. I truly appreciate how over the last few years you have cultivated my passion for color and metals; and have allowed me to flourish. You have all been an inspirational influence during my tenure at East Carolina University, and your guidance and assistance have been invaluable. Lastly, I thank my studio mates. The last three years have allowed me to become friends with some of the most amazing makers. Each has brought a different seed of knowledge and skill set which has created a beautiful garden.

# TABLE OF CONTENTS

LIST OF PLATES	Viii
INTRODUCTION	1
FLORAL SYMBOLISM	1
ROOTS OF HEALING	2
TECHNIQUES	5
CHASING AND REPOUSSE	5
ENAMELING	6
CASTING	7
SYMBIOSIS	9
MEDICINAL PLANT RINGS	10
ALOE VERA RING	11
LAVENDER RING	12
NASTURTIUM RING	13
POPPY RING	14
VALERIAN RING	15
CALENDULA RING	16
HYSSOP RING	17
YARROW RING	18
BORAGE RING	19
HAWTHORNE RING	20
CHAMOMILE RING	21
RESPIRATORY BROOCH	22

CIRCULATORY BROOCH	23
BLOOM WHERE YOU'RE PLANTED	24
PERSEPHONE NECKLACE	25
LANTANA NECKLACE	26
CURATIVE BLOOM TIARA	27
CONCLUSION	28

# LIST OF PLATES

1.	Aloe Vera Ring	11
2.	Lavender Ring	12
3.	Nasturtium Ring	13
4.	Poppy Ring	14
5.	Valerian Ring	15
6.	Calendula Ring	16
7.	Hyssop Ring	17
8.	Yarrow Ring	18
9.	Borage Ring	19
10.	. Hawthorne Ring	20
11.	. Chamomile Ring	21
12.	Respiratory Brooch	22
13.	. Circulatory Brooch	23
14.	Bloom Where You're Planted	24
15.	Persephone Necklace	25
16.	Lantana Necklace	26
17	Curative Bloom Tiara	27

#### "Earth laughs in Flowers" - Ralph Waldo Emerson

Adornment and plant life fascinates me. Throughout the world plant life, especially medicinal plants are highly valued. Flowers, specifically, reflect universality because across countries floral displays and bouquets are integral symbols for major life events. In my work, I enjoy creating jewelry that references both flowers and medicinal plants of the garden. The individual healing plants are replicated in the design of the pieces, with the plant life's cultural significance embedded within.

In addition to the influence of plant life, I strive to clearly link my pieces to sculptural forms, making both the front and the back of the pieces equally important. Often the wearer has a treasure on the back, as well as what is shown to the viewer, providing the wearer a stronger connection to the piece.

Herbs, spices and medicinal plants are the talisman of cultures. The jewelry pieces referencing herbs have a strong connection to passions- for plants and for healing. Instead of simply serving as beautiful status symbols, the pieces serve as powerful external signs of personal expression. To best understand my pieces it is important to discover the historic and cultural roots of floral symbolism and healing plants.

#### Floral Symbolism

In many cultures, specific colors of flowers are connected to symbolic meanings. White blossoms, for example, can represent both purity and death,

while red often portray passions, energy and blood. Yellow flowers can relate to wealth as in gold, or the sun. The shapes of flowers also carry significance. Blossoms with petals pointing outward like sunrays have been associated with the idea of the center- of the world, the universe or consciousness.

In the 17<sup>th</sup> century the popularity of the flower garden blossomed as a status symbol, reflecting that the homeowners were able to afford beauty, rather than just the edible necessity from the common kitchen or herb garden of the past centuries. "Colonial gardens were not an avocation: they supplied the herbs, roots and flowers essential to the community's nutritional and health needs. (Dale 6)

Flowers and plants played a different social role two centuries later; in the 1800s, flowers had symbolic meanings related to mythology, sentiment and emotions. "The idea that flowers represented feelings grew into a system of communicating through flower arrangements." (Encyclopedia of Myths) Books were published that assigned sentimental meanings to specific flowers. This carried into the jewelry of the Victorian age, as the language of flowers was a strong theme.

#### Roots of Healing Plants

The ideas of herbalism have been found in antiquity. In ancient Greek, "the word pharmakeia referred to the use of herbal drugs, potions and charms." (Encyclopedia of Myths) Often the use of herbs was presented in Greek mythology. A very influential herbalist was that of pharmacologist-naturalist

Pedanius Dioscorides who lived in the first century A.D. Traveling extensively along the Mediterranean shore, Dioscorides collected hundreds of plant, mineral and animal specimens. He illustrated and wrote out descriptions in a massive medical work that became the respected pharmacopoeia of the profession for the next 1,600 years. (Aikman 390)

Centuries later when printing began, herbalism entered into its golden age when scholars illustrated and described lengthy herbal concoctions in books. (Aikman 406) The Herbalists illustrated the properties of plants, reflecting the society's interest in their healing powers.

When the New World was discovered the colonists were said to place "almost as much faith in herbs as they did in God, harvesting for teas, tonics, dyes, insect repellants, deodorants and medicines." (Aikman 396) Herbs made eating a pleasurable experience, but also served as important medicines during world exploration.

In the modern age, two-thirds of the world's 6.1 billion people cannot afford western pharmaceutical drugs and continue to rely on plant based traditional medicine.

Just as Herbalists use their hands to carefully pick the best plants to heal their patients, I have carefully sorted through the best combinations of metals to create the botanical inspired pieces in this thesis collection.

The Technical Process

A handcrafted item is intimately tied to the acts that created it- the process of fabrication. Each of my pieces is fabricated, mainly using sterling silver, fine silver, gold and enamels, and always incorporating play of light. My focus is to create pieces that highlight the healing properties of plants as well as the sustaining balance of nature. Jewelry is a visual symbol of an individual's story.

#### **TECHNIQUES**

Chasing and Repousse is the process of moving metal with steel tools.

Vitreous enamel is glass fused onto metal. Casting gives the artist the ability to make a positive and negative mold into which molten metal is injected. I incorporate all of these techniques in my work.

## I. Chasing and Repoussé

Chasing and Repoussé are ancient metal working techniques that date back to the 3<sup>rd</sup> millennium B.C. To begin, the process of chasing and repoussé the metal must be annealed. To anneal, the metal is heated to a soft red color, before it is air-cooled. Annealing metal allows the atoms in the metal to become more fluid and able to absorb the hammering. While the metal is cooling, the pitch bowl is prepared. Pitch is a tar like substance that can be heated to a viscous consistently, but stiffens when cool. The pitch holds the metal in place while it is being chased and repousséd. To prepare the pitch bowl, the pitch is heated with a heat gun until the pitch is fluid, then the metal is placed in the bowl. I often start by placing the metal front side down in order to use the tools to push

the metal from the back to the front. This is repoussé. Using a chasing hammer, and chasing tools (steel punches and carved steel tools of a variety of sizes) the design is pushed from the back of the metal.

Once the metal has been pushed to the desired depth, the pitch is reheated to release the metal. The metal is then annealed to soften. It is then replaced in the warmed pitch, but this time with the front side up. It is then chased, which is the process of using the hammer and steel tools to press the metal and create detail from the front. Chasing allows texture to be added to the dimensional form.

#### II. Enameling

Vitreous enamels create a luminous colorful surface, by fusing powdered glass to metal. I primarily use transparent colors so the textures of the metal to be seen through the glass surface. Enameling may be done on many metals, but for most of my pieces I use fine silver. I enjoy the ethereal quality that the silver has once it has been enameled. The process includes cleaning the metal and coating the surface with gum of tragacanth solution, which creates "glue" so the enamels will stick. Once coated, I sift the powdered enamel in a circular motion over the surface. After it is allowed to dry; it is fired in a kiln set to about 1500 degrees. While it fires, I check on it, watching as the enamel goes through various stages from sugar fired (when the enamel is slightly fired and looks like sugar on the surface), to orange peeled (a little hotter, it looks like the skin of an orange) and finally, it eventually becomes glassy. I enamel both sides of the metal so the enamel acts as a stabilizer, preventing the surface from cracking on the front.

#### III. Casting

Recently, I began lost wax casting, the ancient technique of creating a mold with a negative space into which metal can flow. Lost wax casting allows me to sculpt the material with my hands, rather than with the use of tools. It also allows for direct casting of organic objects. Lost wax casting begins with a wax positive mold of what is desired in metal. A sprue system, made from thinner wires of wax, is added to the metal form in order to create passageways for the molten metal to flow into the negative space. When the sprue system is complete, the wax form is placed into a steel flask. A fine plaster called "investment" is then poured into the flask, surrounding the wax. After the investment has had the chance to dry, it is placed into a large heated kiln for the wax to burn out. Once a burnout is completed, a negative space is left in the investment. When cast, the negative space of the model becomes a positive piece of metal.

**Description of Created Works** 

I see my works as offering the viewer a close look into plants, focusing on the details of nature. When observing flowers and plants, the smallest features are some of the most fascinating and important to my work. For example the heart of the plant is its flower and reproductive organs are found in the small center of the flower. The ability to capture the essence of the plant is important to me and allows me to share a vital aspect with the wearer and the viewer of my jewelry.

\_\_\_\_\_

The Curative Bloom body of work is displayed in two different formats. While most of the pieces are displayed in fashioned environments, some are interactive with the public.

#### Symbiosis:

The small signs of friendship in my life have had a huge impact on me; through the "Symbiosis" of the piece, I hope the sharing and passing on of something small will have a significant impact on others. Throughout my life people have often given me flowers and each has represented a positive memory. "Symbiosis" is a piece based on unexpected kindness. As the other pieces are the medicinal plants for physical ailments, "Symbiosis" is a piece for internal happiness. I am excited to have an interactive piece for viewer participation. As people enter the show, the bamboo daisy petals necklaces are on the wall. The viewer is asked to participate by holding them as they walk through the show and contemplate the feelings that they associate with the small symbol. Afterwards,

they may choose to leave the necklace or take it with them and I hope that the small symbol of friendship will be passed on to someone that they feel is in need of a reminder that they are connected to others.

#### Medicinal Plant Rings:

These "Medicinal Plant Rings" will act as talisman of the cultural values associated with Medicinal plants. The series "Medicinal Plant Rings" showcases prominent herbs and the healing properties associated with them. The rings are fabricated in wax and a mold is created for lost wax casting. Once the rings are cast in fine silver, all details from the mold are replicated in the metal. In order to bring color to the rings, I enamel them. The rings have been created as three - dimensional sculptural objects so they can interact this way with the body.

Plate 1



# "Aloe Vera Ring"

# Sterling Silver, Fine Silver, Enamels

**USES:** Aloe gel is used in creams to soothe, heal, and moisturize the skin. It can be scraped from split leaves for first-aid treatment of small burns, cuts, sunburn, eczema, and Poison Ivy rash.

Growing up in Florida, a four-foot tall aloe plant grew in my backyard and soothed many sunburns. The prime growing conditions allowed the succulent to reach enormous heights. The height of the ring is in homage

to the tall plant of my childhood. The fabricated enameled "Aloe Vera Ring" is kinetic, as it is able to spin.

Plate 2



# "Lavender Ring"

# Sterling Silver, Fine Silver, Enamels

**USES:** Flower water is a skin toner useful for speeding cell renewal. The essential oil is a highly valued perfume and healer. It is antiseptic, mildly sedative, and painkilling.

This piece is meant to resemble Racine purple toned vitreous enameled flowers with silver leaves which envelope the wearer's finger. My younger

sister moved to France four years ago. I have been fortunate to have the opportunity to visit her during spring the last few years, while the Lavender was in bloom throughout the country. The "Lavender Ring" was created with thoughts of riding trains through the fields in bloom.

Plate 3



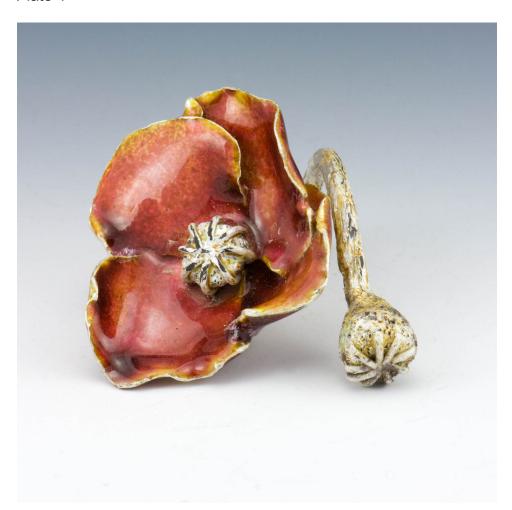
"Nasturtium Ring"

Sterling Silver, Fine Silver, Enamels

**USES:** The whole plant is used as a reputed rejuvenator and aphrodisiac. The seeds contain an antibiotic and, with the leaves and flowers, fight respiratory bacteria.

The ring references a full blossom in golden yellow and orange hues with vitreous enameled bloom and a brilliant green pad leaf. As Nasturtium grow, they turn the flower heads to the sun. I tried to emulate the sunlight in this ring. As each of the rings is a talisman and a reminder of healing properties and experiences, I created the "Nasturtium Ring" as a memento of Byron Bay Australia where I camped in a field of nasturtium.

Plate 4



"Poppy Ring"

Sterling Silver, Fine Silver, Enamels

USES: Opium is latex from the unripe seed capsules and an important ancient painkiller. The narcotic alkaloids of opium are made into painkillers. Four red and warm toned petals, which are vitreous enameled on a stem, wrap around the wearer's finger with a poppy pod. As the flower is metaphorically holding the wearer's finger, the addictive medicinal properties of the plant grasp the user.

Plate 5



"Valerian Ring"
Sterling Silver, Fine Silver, Enamels

**USES:** The herb treats headaches, muscle cramps, and irritable bowel syndrome and is used topically for wounds, ulcers, and eczema.

Light pink and yellow toned vitreous enameled flowers elegantly meet at the center of the ring. Valerian grew in my grandmother's herb garden and in childhood was a favorite to be used in floral crowns. The ring has been made to encircle the wearer's finger in a loose interpretation of these crowns.

Plate 6



"Calendula Ring"
Sterling Silver, Fine Silver, Enamels

USES: Calendula is an antiseptic and antifungal, which contains hormone and vitamin A precursors. Internally, it treats stomach pain and inflamed lymph nodes and stimulates the liver, aiding alcoholics. This ring is an open vitreous enameled orange toned bloom, with a green leaf wrapping around the centered flower. The ring is able to emulate the early growing cycle of the budding plant.

Plate 7



# "Hyssop Ring"

### Sterling Silver, Fine Silver, Enamels

USES: Hyssop leaves grow a mold, which produces penicillin on its leaves with a multitude of antiviral and bacterial qualities. The plant is used to create an infusion, which is a sedative expectorant for flu and bronchitis

Racine purple flowers with curved silver stem, lie across the wearer's fingers. The broad leaves grasp the wearer's finger. The purple tones of the

flowers are muted in order to present the calming effects which the plant holds as a sedative.

Plate 8



# "Yarrow Ring"

# Sterling Silver, Fine Silver, Enamels

USES: The flower tops of the Yarrow plants aid in digestion and are a cleansing tonic.

The delicate umbel arrangement of the smaller orange vitreous enameled flowers signifies the quietness of the healing properties of the plant. The flowers spin, demonstrating kinetic movement.

Plate 9



# "Borage Ring"

### Fine Silver, Enamels

USES: Borage infusion is an adrenalin tonic taken for stress, depression, or steroid treatment.

The rising bud and 5 petal blue toned flower is of a plant that effects universal health. Borage is one of the first herbs I grew while in the university, and I appreciate how all parts of the plants hold healing properties. The Borage ring is created to show new growth with the young blossom and mature flower intertwined on the ring.

Plate 10



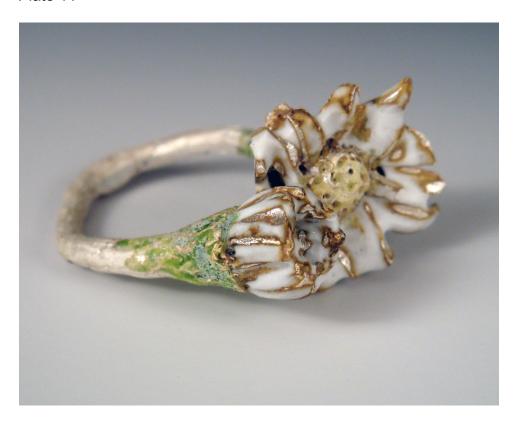
# "Hawthorne Ring"

# Sterling Silver, Fine Silver, Enamels

USES: Hawthorne is used as a circulatory tonic to treat heart weakness.

Casting an organic stick creates the ring and attaching red toned vitreous enameled berries are the centerpiece. The stick delicately cascades across the wearer's fingers.

Plate 11



# "Chamomile Ring"

### Fine Silver, Enamels

USES: Chamomile soothes the nervous system. Often Chamomile tea is drunk to assist with relaxation.

Part of the daisy family, the yellow toned centers with light colored petals circle the finger. Chamomile tea was a comfort drink from childhood. I was always interested in how the small flowers had such a strong effect on my well being.

#### **Brooches**

Plate 12



## "Respiratory Brooch"

### Sterling Silver, Fine Silver, Enamels

I have created the respiratory brooch as a contour shadow of the herbs that are associated with healing respiratory illness. As breathing is a constant need and is in the background of existence, I created this piece to reflect the quiet essential quality of breath. The brooch is formed sterling silver, worn completely across the chest, emulating the herbs, which are highlighted with vitreous enameled elements and peridot (a stone associated with good luck and fortune) on the backside.

Plate 13



# "Circulatory Brooch"

# Sterling Silver, Fine Silver, Keum-boo gold, 24 Karat gold

The circulatory brooch is worn over the heart, as it is the center of the circulatory system, and of a person. It is fabricated from layers of sterling silver herb forms including motherwort, mistletoe, harebell and Grecian foxglove. The herbs all promote different aspects of heart health, from heart disease to regulation of blood pressure and rapid heartbeat.

#### Necklaces

Plate 14



# "Bloom Where You're Planted" Sterling Silver, Fine Silver, Enamels

"...and the day came when the risk to remain tight in the bud was more painful than the risk it took to blossom." Anais Nin

Graduate school has been a growing experience for me, mainly focused on balance. While here I had to learn to balance my priorities and choose to change elements of my life in order to grow stronger. "Bloom Where You're Planted" is a reflection of the changes I have encountered over the last three years. Quite literally, the necklaces are balancing pendulums, which interact with the wearer through the kinetic elements. Each piece emulates the stages in the growth of a flower with a counter balance of a grounding element. Through my experiences, I have been allowed to grow and change, and find the needed balance.

Plate 15



# "Persephone Necklace"

#### Sterling Silver, Fine Silver, Enamels

Mythology has always intrigued me and is a constant source of inspiration in my art. The myth of Persephone is the story of spring, and how everything must lay dormant in order to grow. I see this as an expression of life. The collar style neckpiece is made from chased and repoussed botanical imagery with blooming enameled flowers. As in the story of the seasons, it includes the quiet aspect of winter balancing the growth of spring. The necklace is subtle on the back with an explosion of color in the front.

Plate 16



#### "Lantana Necklace"

### Sterling Silver, Fine Silver, Enamels

The Lantana plant is a wild flower which is considered an invasive species in the southern hemisphere, but is cultivated in the United States. The flowers change in color from lighter yellows and golden hues to deep magentas as the plant matures. On a single umbel of flowers, there may be a variety of colors. "Lantana Necklace" commemorates one of my favorite plants of childhood, as the color changes felt magical. The necklace is created from stylized enameled floral arrangements with the center pendant strung in the form of a lei.

#### Tiara

Plate 17



#### "Curative Bloom Tiara"

#### Sterling Silver, Fine Silver, Enamels

The act of decorating the head was one of the earliest human artistic endeavors. In many cultures the head was thought of as the center of intelligence and the source of emotional expressions. Curative Bloom Tiara is created to encapsulate the head with healing plants for mental health. Gingko is known to improve efficiency and treat depression, Poppies contain alkaloids of opium which are important pain killers. The golden hued vitreous enameled yarrow flowers assist with the treatment of allergies, and reduce high blood pressure.

#### Conclusion

My work, mentally and physically, is from seed to bud to bloom. The earlier works have the look of sprouting seeds and now have grown into more floral forms. The story of growth and change is apparent in these pieces. Subconsciously, I create work in bloom from the perspective of an herbalist. A comfort in making has been achieved and knowledge is now at the forefront. A goal of mine is to seduce the audience to look and feel more about the wonder of nature, gardens and plants. Like plants that sprout again, but with subtle modifications, I want my pieces to develop their own story as they are passed through generations and worn as jewelry.

#### Works Cited

Aikman, Lonnelle. "Herbs for All Seasons". National Geographic. Volume 163, No.3, March 1983: 387-410.

Binney, Ruth.editor. *The Plant World. The World Book Encyclopedia of Science.* Volume V. Chicago, Illinois: World Book Inc. 1989.

Bremness, Lesley. *Eyewitness Handbooks- Herbs*. New York, New York: DK Publishing, Inc. 1994.

Cartlidge, Barbara. *Twentieth-Century Jewelry*. Fribourg, Switzerland: Office Du Livre.1985.

Cera, Deanna Farneti, editor. *Jewels of Fantasy Costume Jewelry of the 20<sup>th</sup> Century.* New York, New York: Harry Abrams Publishing. 1992.

Corner, E.J.H. *The Life of Plants.* Cleveland, Ohio. The World Publishing Company. 1964.

Dale, Florence and Ziga, Charles. *A Handbook of Edible Flowers: Their Cultivation and Use.* New York, New York: Barnes and Noble Books.1999.

Encyclopedia of Myths. "Flowers in Mythology." August 2009. [Www.mythencyclopedia.com/Fi-Go/Flowers-in-Mythology.html]

Heckman, Marsha. *Lei Aloha Flower Lei of Hawai'i with Instructions*. Waipahu, Hawai'i: Island Heritage Publishing.2001.

Hermann, Matthias. *Garden Flowers*. Genève, Germany: Minera, 1973.

Hoffmann, David. *The Complete Illustrated Herbal, A Safe and Practical Guide to Making and Using Herbal Remedies*. New York, New York: Barnes and Noble Inc. 1996.

Howard, Maurice and Snodin, Michael. *Ornament: A Social History Since 1450*. New Haven, CT: Yale University Press.1996.

King, Matt. *Flora: Growing Inspirations*. United States Botanical Garden, Washington, DC, 2009.

Kufeld, Adam. *Flowers Portraits of Intimacy*. New York, New York: Stewart, Tabori and Chang. 2001.

Little, Carl. "The Future of Floral: Marjorie Simon." Ornament. Volume 32.No.2: 42-47. Print.

Munn, Geoffrey. *Tiaras: Past and Present*. London, England: V &A Publishing. 2002

O'Rush, Claire. The Enchanted Garden, Discovering and Enhancing the Magical Healing Properties in your Garden. New York, New York: Gramercy Books. 2000.

Philips, Clare. *Jewelry From Antiquity to the Present*. London, England: Thames and Hudson. 1996.

Prest, John. The Garden of Eden, The Botanic Garden and the Re-Creation of Paradise. New Haven, CT: Yale University Press. 1981

Seaton, Beverly. *The Language of Flowers, a History*. Charlottesville, VA: University of Virginia Press. 1995.

Theoi. "Flora1 Plants of Greek Myth." August 2009. [www. Theoi.com/flora1.html]

Von Cutsen, Anne. A World of Head Ornaments Milan, Italy: Skira Editore. 2005

Waterman, Catherine. Flora's Lexicon: An Interpretation of the Language and Sentiment of Flowers: with an Outline of Botany, and a Poetical Introduction. Boston, MA: Crosby, Nichols, Lee and Company.1860.