# WORLD INSECTIVOROUS PLANTS!

Here it is, your own W1P catalog, but it is more than just a catalog. It is your personal passport to a strange, forgotten, sometimes bizzare botanical world where plants are no longer confined to lead a passive life, but now assume an active rule as relentless and merciless hunters with an insatiable hunger for "flesh," and an equally unquenchable thirst for the "fluids of life." Beware...and welcome to the fascinating plant world of carnivores.

We are World Insectivorous Plants (WIP). A well established, dynamic organization with the worldwide reputation as a pioneer in the field of conservation and distribution of native, exotic and rare carnivorous plants (CP). Since the early days of our founding, over a decade ago, we have been sensitive to collector's needs. We were the first to provide not only text in our catalog, but individual, accurately detailed drawings of each listed variety. We were the first to provide you with not only plants, but specific and comprehensive culture instructions to insure your continual enjoyment of each plant. We were the first to propagate and introduce the really "rare exotics" so your plant would not merely be one that was ripped from its native soil and stuffed in the mail, but one that was individually cultivated, selectively bred and watched over. Our philosophy is bold and yet simple ... "To be first, and to provide the very best!!"

It is our sincere wish that you enjoy all aspects of carnivorous plants, but if you get lost ... let us be your guide. You can do this by writing our "WIP Consumer Services" section, we are staffed with knowledgeable people eager to assist you.

Good Growing!

## Cultivating Considerations

Carnivorous plants are fascinating! Part of the fascination is in creating an artificial habitat in which they will thrive and multiply. Our greenhouse propagated and grown plants have been selected and bred for both beginning ant experienced collectors.

Basic culture for most species simply requires a humid atmosphere, moist acid soil, pure water, bright light and moderate temperatures. These factors can easily he provided in a terrarium or greenhouse environment.

Concerning culture or growing hints, at WIP we feel that general cultivating instructions are just "too general" for all species as their natural habitats vary extensively. To assist you to duplicate the natural environment or a livable environment for each species, we include specific instructions detailing plant growth factors for each species ordered.

To prepare for your plants, which are shipped bare-rooted in long fiber sphagnum moss, we recommend the partial preparation of a growing chamber before an order it placed. A soil medium of sphagnum moss or a 2:1 mixture of fine sand and peat most should be moistened and arranged for planting. Three to five inches in depth it adequate for most species.

Finally, to answer those commonly asked questions on how to get started, we have provided within the pages of our catalog a step-by-step guide on "How To Plant A CP Terrarium." The outlined WIP method of terrarium culture has been used by a multitude of collectors to successfully establish and maintain a terrarium within their homes.

## ***CULTURE CLASSIFICATIONS***

World Insectivourous Plants offers an extensive collection of insect eating plants. The diversity of our material merits the individual cultural instructions provided with each ordered species or hybrid. We also believe a comparative guide as to the ease or difficulty in maintaining a specific plant outside of its natural climatic zone should he provided as a service to our customers.

The following Culture Classes are developed as an aid in selecting plants to meet your experience in growing carnivorous species. The classifications and plants falling within a classification are from our experience and may vary with individual opinion.

Class 1 Very easy culture. Plants requiring a minimum of care, basic environmental factors.
Class 2 Easy. Periodic Inspection. May require easily attained dormancy period.
Class 3 Plants that require special observation during seasonal variations. May need special or unusual dormancy period.
Class 4 Plants that require consistent care or susceptible to loss through minor environmental fluxuations.
Class 5 Plants that require precisely controlled environmental conditions. Recommended for dedicated growers.

## ***CARNIVOROUS PLANT BOOKS***

The Carnivorous Plants by F. E. Lloyd. Paperback reprint of 1942. 352 pages, illustrated.
Review: A classic, but keep your botany dictionary handy as this is a technical description of all CP genera.

Carnivorous Plants by Gordon Cheers. 1983. Paperback. 95 pages, illustrated.
Review: This relatively new book adds a new dimension in cultivating CP. It's a colorful Australian paperback that presents definative facts for, growing all popular genera and relates uniquely to native Australian plants such as Cephalotus and Byblis. Of particular interest are, the references to Sarracenia hybrids including suburb photos of cultivated plants. The rare field photos of Cephalotus and Drosera make this a must-have-book.

Nepenthes of Mt. Kinabalu by Shigeo Kurata. 1976. Paperback. 80 pages, illustrated.
Review: The many magnificent Nepenthes that dwell on the MOUNTAIN include the gigantic N. Rajah and the vicious-looking N. bicalcarata are portrayed in the finest and most vivid color photographs our staff has ever seen. This book is a source of information on Nepenthes unobtainable in most references.

Carnivorous Plants of the United States and Canada by Dr. Donald Schnell. 1976. Hardback. 125 pages, illustrated.
Review: This very impressive book does for the U.S.-Canadian CP what Mr. Kurata'a book does for the Nepenthes. It is handsomely illustrated and written in a non-technical manner which givves a vivid picture of the carnivorous genera of the two countries. Fine color closeups of leaves and flowers, as well as habitat photos abound. This is felt by us to be the best work of its class ever published here. It will surely be a classic in its own time.

Reports on the Status of Gulf Coast Carnivorous Plant Populations by James M. Miller 1979. Paperback. 12 pages, illustrated.
Review: An up to date report on CP populations in the gulf states. Provides habitat information and general locations of plant colonies. A CP tour guide for the gulf area.

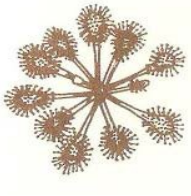
Carnivorous Plants by Adrian Slack. 1979. Paperback. 240 pages, illustrated.
Review: Devoted to the amateur collector, this highly informative book covers the do's and don'ts of home cultivation for all CP families. Generously illustrated with line drawings, black and white and color photographs showing exact details of cultivated plants. This book contains enough information between its covers to transform a novice into an experienced grower.

**FAMILY:** *Droseraceae* **SUNDEWS** **GENUS:** *Drosera*

Sundews and their related cousin, the Venus Fly trap, are the most popular carnivores available. This is due to their spectacular colors, the great variety of size and shape they offer, their noticeable movements and the ease in which they are cultivated and propagated in an indoor terrarium. Each Sundew leaf is covered with numerous tentacles that are tipped with glands that secrete a sticky dew–like substance that glistens in the sunlight to lure and capture small insects. The tentacles bend inward to hold the prey while digestive enzymes begin the complicated process of absorbing vital minerals. They are a widespread and diversified genus of over 125 species and varieties ranging in size from miniscule pygmies to giants twining over two meters in length.

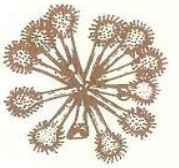
## *North and South American Species*

Approximately 25 species of *Drosera* are native to the New World. Nearly 20 of them are found in South America. The American plant, *D. filiformis* var. *tracyi* is one of the world's largest Sundews with leaves thrusting upwards to 80 cm in its natural habitat. The world famous Venus Fly Trap is native to the coastal plains of North and South Carolina.



D. capillaris
Dist: S E U S A.
Habit: Rosette, to 5 cm
Culture Class: 2

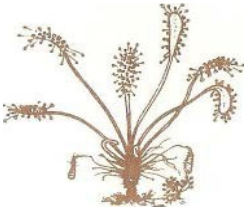
D. capillaris (Florida)
Dist. Central Florida. U.S.A.
Habit: Semi-Upright, to 5 cm
Culture Class 2



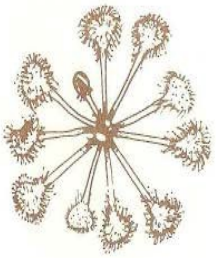
D. capillaris (Giant Gulf Coast)
Dist: Gulf Coast region, U.S.A.
Habit: Rosette, to 6 cm
Culture Class: 2

D. filiformis
Dist: N.E. U.S A
Habit: Upright, to 20 cm
Culture Class: 3

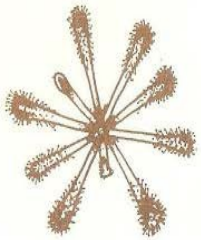
D. filiformis var. tracyi
Dist: S.E. U.S.A.
Habit: Upright, to 40 cm
Culture Class 2



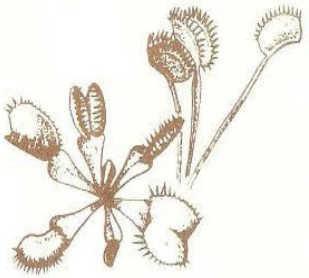
D. intermedia
Dist: E. U.S A.
Habit: Upright, to 8 cm
Culture Class 2



D. rotundifolia
Dist: U.S.A.
Habit: Rosette. to 8 cm
Culture Class: 3



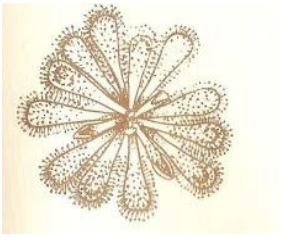
D. montana
Dist: Rosette, to 5 cm
Habit: Rosette, to 5 cm
Culture Class 1



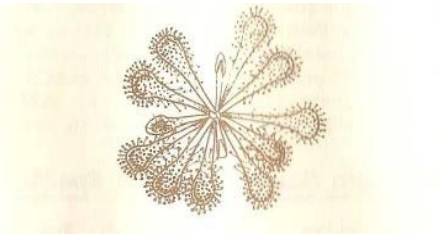
Dionaea muscipula
Dist: Coastal Carolina. U.S.A
Habit: Rosette, to 15 cm
Culture Class: 3

## ***African Species***

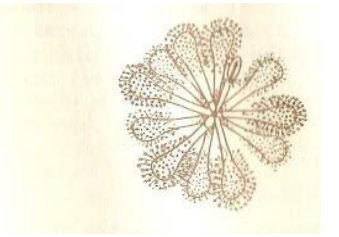
The African Continent contains approximately twenty species of *Drosera*, the majority being small rosetted varieties. A few such as *D. capensis* exhibit long slender leave s that are remarkable in the way they curl completely around the victim's body. Most outstanding of the rosetted species is *D. aliciae*, long a favorite among collectors with its crimson tentacles accentuated against the pale main leaves.



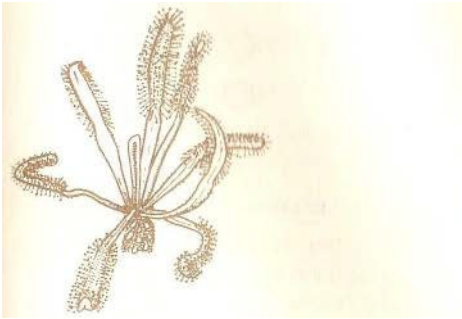
**D. aliciae**
Dist: S. Africa
Habit: Rosette , to 8 cm
Culture Class: 2



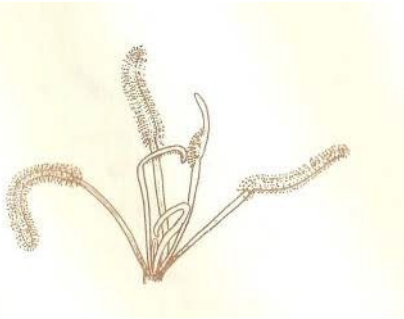
**D. aliciae (Pale Flower Form)**
Dist: S. Africa
Habit: Rosette , to 8 cm
Culture Class: 2



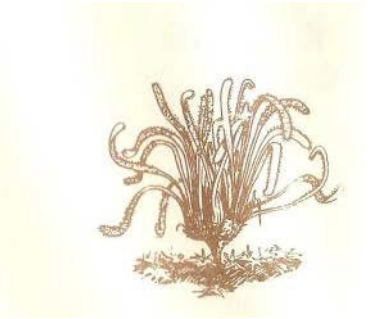
**D. natalensis**
Dist: S. Africa
Habit: Rosette , 4 cm
Culture Class: 2



**D. capensis**
Dist: S. Africa
Habit: Upright to 20 cm
Culture Class: 1



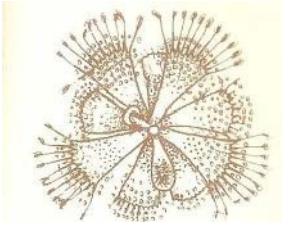
**D. capensis (Narrow Leaf)**
Dist: S. Africa
Habit: Upright, to 30 cm
Culture Class: 1



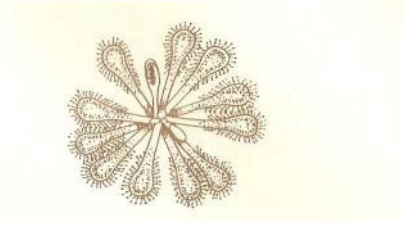
**D. capensis (Crestate)**
Dist: Horticultural Sport
Habit: Upright, to 10 cm
Culture Class 1

## ***Asian Species***

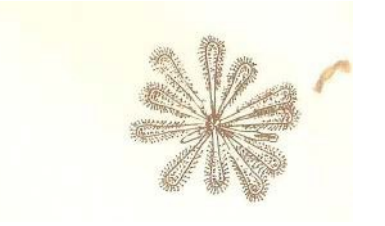
The Asian Continent does not support a large variety of *Drosera*. A few are diversified in their distribution and found on other continents. The small rosetted species and varieties are considered very easy in cultivation. *D. burmanni* is very prolific in producing seed and is grown by most collectors as an annual.



**D. burmanni (Taiwan)**
Dist: Taiwan
Habit: Rosette, to 5 cm
Culture Class: 1



**D. spathulata (Kansai Type)**
Dist: Kansai, Japan
Habit: Rosette, to 5 cm
Culture Class: 1



**D. spathulata (Kanto Type)**
Dist: Kanto, Japan
Habit: Rosette. to 4 cm
Culture Class: 1

## ***Australia/New Zealand Species***

The isolated continent of Australia and its island neighbor New Zealand are together the "Sundew Capitol of the World" with over 60 species and varieties. Native only to this region are the "Pygmy Sundews" and their unique means of gemmae propagation and the unusual tuber forming species which twine up to two meters in length. Most popular are the easy to grow *binata* complex with their mystifying leaf patterns and delicate flowers.

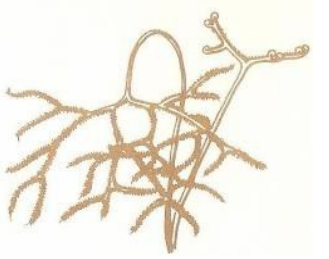
**D. adelae**
Dist: N. Australia
Habit: Semi-Upright, to 15 cm
Culture Class: 4

**D. hamiltonii**
Dist: S.W. Australia
Habit: Rosette, to 8 cm
Culture Class: 2

**D. binata**
Dist: Australia, New Zealand
Habit: Upright, to 25 cm
Culture Class: 1

**D. binata var. dichotoma**
Dist: E. Australia
Habit: Upright, to 30 cm
Culture Class: 2

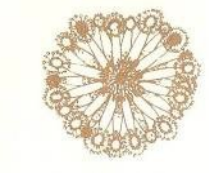
**D. binata var. multifida**
Dist: E. Australia
Habit: Upright, to 35 cm
Culture Class: 1



**D. binata var. multifida (Extreme)**
Dist: Stradbroke Island, Australia
Habit: Upright, to 30 cm
Culture Class: 2

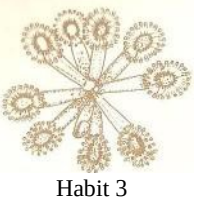
## ***Pygmy Sundews***

Pygmy Sundews are unusual in both size and growth cycle. There are the smallest of all Sundews typically ranging in size from 1 to 2 cm. in diameter. In late fall or early winter during cool long-night conditions they form gemmae, tiny plates in the center bud which hi relit off to form new plants. We propagate a number of species and many of the unofficially named varieties discovered in S.W. Australia during the mid-1970's. The following habit descriptions represent the varieties we stock and they-will be classified as such in our Updates this year.



Habit 1

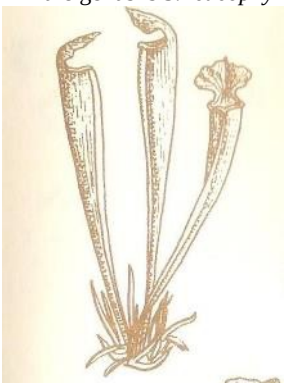
Habit 2



Habit 3

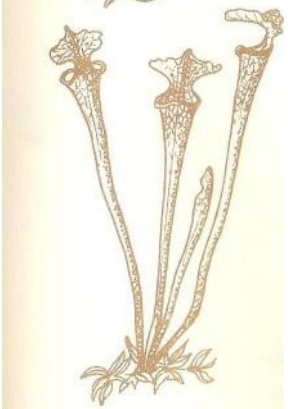
**FAMILY:** *Sarraceniaceae* ***NORTH AMERICAN PITCHER PLANTS*** **GENUS:** *Sarracenia*

*Sarracenias* are native American pitcher plants. The genus is comprised of eight species and numerous hybrids, both natural and manmade. Insects are attracted to the hollow tubes where they eventually die and provide nourishment for the plant. The plant itself exhibits no movement. In late fall, growth stops in preparation for winter dormancy. a period in which the leaves begin to decay and the plant rests. They will tolerate freezing temperatures during dormancy, provided the root system does not freeze. Most popular for terrariums are the low growing species: *S. purpurea*, *psittacina* and *S. rubra*. Most colorful and outstanding of the genus is *S. leucophylla*, a spectacular giant which reaches one meter in height.



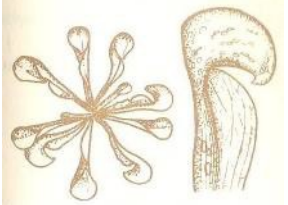
**S. alata**
Dist: Eastern Gulf Coast, U.S.A.
Habit: Upright, to 80 cm
Culture Class. 2

**S. flava**
dist: SE. U.S.A.
Habit: Upright to 75 cm
Culture Class: 2



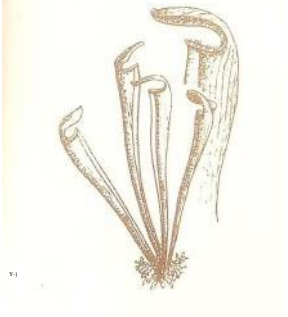
**S. leucophylla**
Dist: S.E. U.S.A.
Habit: Upright, to 100 cm
Culture Class: 2

**S. minor**
Dist: S.E. U.S.A.
Habit: Upright, to 50 cm
Culture Class: 2



**S. psittacina**
Dist: S.E. U.S.A.
Habit: Rosette, to 20 cm
Culture Class: 2

**S. purpurea (venosa)**
Dist: S.E. U.S.A.
Habit: Rosette, to 30 cm
Culture Class. 1



**S. rubra (Gulf Coast)**
Dist: Gulf Coast, U.S.A.
Habit: Upright, to 40 cm
Culture Class: 2

**S. purpurea** hybrids
Dist Natural and manmade
Habit. Semi-upright to 50 cm
Culture Class: 2

**FAMILY:** *Sarraceniaceae* **Marsh Pitcher** **GENUS:** *Heliamphora*

Probably the most elusive pitcher plants in the world are the Marsh Pitchers from Northeastern South America. Six species comprise the genus with one species reported to attain a height of 4 meters in isolated habitats. Presently in cultivation we only have the smaller growing species which seldom reach 20 cm in overall height. They seem to prefer a cool-moist environment similar to *Darlingtonia californica.* Due to their extreme rarity in cultivation, it is suggested they be grown by the most dedicated collectors who will propagate and distribute them to others.

**H. heterodoxa**
Dist: Venezuela
Habit: Upright, to 30 cm
Culture Class: 4

**H. nutans**
Dist: Venezuela
Habit: Upright, to 30 cm
Culture Class: 4

**H. minor**
Dist: Venezuela
Habit: Upright, to 15 cm
Culture Class: 4

**FAMILY:** *Nepenthaceae* ***TROPICAL PITCHER PLANTS*** **GENUS:** *Nepenthes*

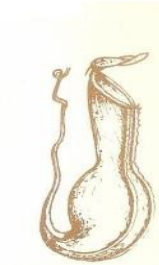
Plants of the genus *Nepenthes* have been one of the most difficult to acquire for the CP collector. For years, only a few of the old time hybrids were available and many of them were suspect in their identity. Fortunately, a few firms now offer both species and hybrids and there seems to be a concerted effort to properly identify plants offered for sale

Historically, *Nepenthes* species have been in and out of cultivation since the 1700's It was not until the latter half of the 19th century that stovehouse growing conditions and knowledge of *Nepenthes* cultural requirements were gained to produce them on a commercial level. Initially, the majority of plants were field collected or hybridized by two firms; "Such" in the U.S.A. and "Veith" in Great Britain. While a good number of species were brought into cultivation, many were mislabled and the record keeping on the hybrids was poorly kept. Consequently, the parentage of many early hybrids is now in serious doubt.

The early flurry of collecting and breeding slowed to all but a standstill at the turn of the century. By the close of WWW I, most of the best species and many fine hybrids vanished from culture. A less productive but more organized breeding program took place in Japan between the great wars. Unfortunately, most of these Japanese hybrids were lost during or shortly after WWII.

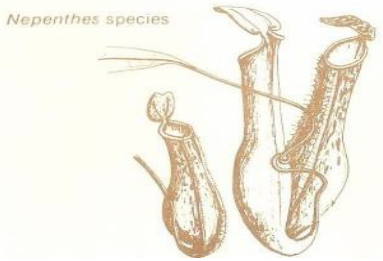
*Nepenthes* cultivation has just recently been reawakening. CP and non-CP plant enthusiasts are finally realizing the awesome beauty of these marvelous plants. This new interest has fostered a vibrant demand for more species and the creation of new horticultural hybrids. The older hybrids left over from the heyday of British and Japanese breeding are beginning to reappear in the U.S.A. WIP is pleased to be the formost leader among commercial growers to reaffirm and distribute this genus to plant collectors.

We have developed detailed line drawings representing the configuration of mature pitchers for each listed variety as an aid in selection.



**N. alata (Boschiana mimic)**
Dist: East Indies
Habit: Vining to 3 m
Culture Class: 2

**N. ampullaria**
Dist:S.E. Asia
Habit:Upright, to 5'm
Culture Class: 2



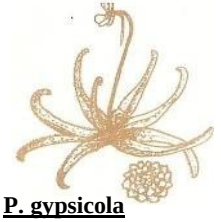

**N. gracilis**
Dist: S E. Asia
Habit: Upright, to 50 cm
Culture Class: 2

**N. rafflesiana**
Dist: S E. Asia
Habit: Upright, to 3 m
Culture Class: 2

**FAMILY:** *Lentibulariaceae* **BUTTERWORTS** **GENUS:** *Pinguicula*

*Pinguiculas* are commonly called Butterworts because of their historical use in curdling milk to make butter in Old England. They are found in tropical, temperate and alpine or sub-arctic locations. Each leaf is similar to household flypaper in that small insects become stuck in the glue-like substance produced by each leaf. The plant shows movement in that the leaf margins curl inward after capture to form a protective barrier to thwart escape of the prey. The tropical species have generally been considered to be the best of the genus because of their large and colorful flowers. *P. planifolia* is quite a contrast to other butterworts as its leaves become a bloodish red color when grown under high light levels.

**P. caerulea**
Dist: S.E. U.S.A.
Habit: Rosette, to 8 cm
Culture Class: 3



**P. gypsicola**
Dist: Mexico
Habit: Rosette, to 5 cm
Culture Class: 3

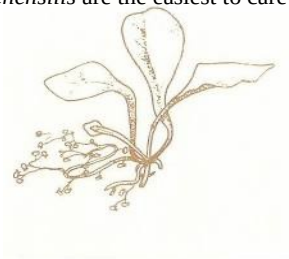
**P . moranensis**
Dist: Mexico
Habit: Rosette, to 8 cm
Culture Class: 3

**P. planifolia**
Dist: S.E. U.S.A.
Habit: Rosette, to 15 cm
Culture Class: 3

**P. pumila**
Dist: S.E. U.S.A.
Habit: Rosette, to 5 cm
Culture Class: 5

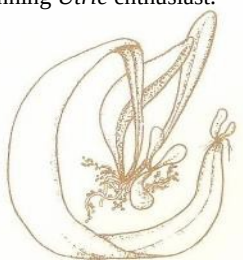
**FAMILY:** *Lentibulariaceae* **BLADDERWORTS** **GENUS:** *Utricularia*

The genus Utricularia has the greatest number of species of any one carnivorous genus with over 165 representatives. Each plant bears numerous bladders (traps) that operate at remarkable speeds, far too fast for the human eye. *Utrics* are native to very wet areas and are classified into three groups: aquatics, epiphytics and terrestrials. The most popular or outstanding of the species we grow are *U. sandersonii* and *U. longifolia* (attractive flowers; and *U. pubescens* (minute peltate leaves). *U. subulata* and *U. prehensilis* are the easiest to care for and are recommended for the beginning *Utric* enthusiast.



**U. calycifida**
Dist: S. America
Habit: Terrestrial herb
Culture Class 2

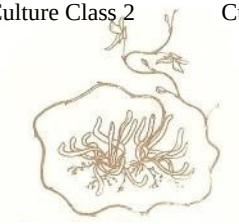
**U. dusenii**
Dist: Brazil, S. America
Habit: Terrestrial herb
Culture Class: 3



**U. tricolor**
S. America
Habit: Terrestrial herb
Culture Class: 3

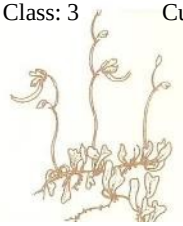
**U. longifolia**
Dist: Brazil, S. America
Habit: Terrestrial herb
Culture Class: 3

**U. praelonga**
Dist: Brazil
Habit: Terrestrial herb
Culture Class: 3

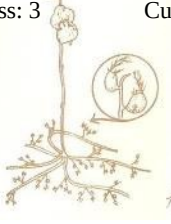


**U. prehensilis**
Dist: Africa
Habit: Terrestrial herb
Culture Class: 1

**U. pubescens**
Dist: Africa, S. America
Habit: Terrestrial herb
Culture Class: 4



**U. sandersoni**
Dist: S. Africa
Habit: Terrestrial herb
Culture Class: 2



**U. gibba**
Dist: Pan-Tropical
Habit: Aquatic herb
Culture Class: 2

**U. subulata**
Dist: E. U.S.A.
Habit: Terrestrial herb
Culture Class: 1

# WIP - OPERATIONAL GUIDELINES

World Insectivorous Plants is a unique company. We were formed during the early 1970's as a conservation based effort to propagate and distribute carnivorous plants on a worldwide basis to as many collectors as possible. Our objectives have been and remain unchanged to "increase the variety and quantity of plants and collectors to overcome the possible extinction of carnivorous plant species". We are strong proponents of the "location diversity" means of continual survival and the need to retain plants in their native and unmolested habitats. We have predicated our growing philosophy on the commercial production of plants rather than their removal from unowned natural habitats. We have made available to collectors over two hundred varieties of carnivorous plants since our founding. We are modest, yet proud of our past accomplishments. Our aim is to help you fully enjoy the magnificent wonder and beauty of these spectacular plants. It has always been our policy to provide the best possible product at the lowest possible prices to make the hobby available to everyone, especially students who have a limited income and resources.

Due to the fact that a majority of our plants require two or more years to produce, it is extremely difficult for us to project future inventories to include them in our general catalog. Consequently, we have developed the "WIP Updates" or Current Order Form. Each catalog is furnished with the most current "Update" which contains a comprehensive listing of the plants that are in inventory that meet our rigorous shipping standards. Also included are plant reviews, "Season Specials" and other bargains, plus current events here at WIP.

We adjust and evaluate our inventory three times each year and therefore produce three Updates to correspond with the seasons of spring, summer and fall. We do not attempt to solicit customers during the winter months because of the dangers of shipping during inclimate weather. All correspondence and business related communications will be delayed considerable during the winter months. Only during the shipping season of March thru October will we be able to respond normally to your inquires and orders.

If you have a deep interest in these plants, we recommend that you subscribe to our Update service. The cost is negligible, just 50 cents per issue. You will find that we will include a lot of plant varieties in the Updates that are not mentioned in the general catalog. We are working with many new varieties and creating so many new and rare hybrids that they cannot possibly be included in a basic stock catalog. Of special interest to many collectors is the work that we are doing in hybridizing Sarracenias. We have developed countless new and attractive plants that will be highlighted in our Updates and made exclusively available to our clients.

Returning to our long term objectives, it has been our policy to raise plants within our own greenhouses or purchase them from reputable satellite growers to insure quality and true plant identity. Competition from field collected plants has forced us to sell many plants below our cost just to compete in a very free marketplace. One of our earlier objectives was to acquire a large natural CP bog which contained a broad spectrum of species naturally growing within its boundaries. It was felt that we would be able to study and experiment with untested propagation concepts and be able to advance the new field of bog management by direct involvement and control of a natural CP site. WIP made a commitment to CP field studies with the acquisition of a 40 acre bog in 1985. Because we are able to manage and expand the natural plant population, we will be able to offer field grown plants to our customers in addition to our greenhouse cultured plants. In effect, we will be able to compete with field collectors on their own terms but have the advantage of controlling the habitat to increase plant yield and be able to replant and cultivate crops like any agricultural product.

We are extremely excited about our new field and have begun steps to produce plants to meet everyone's needs. We will list our field grown plants in the Updates in a new separate section. WIP field grown plants will be mature—full sized specimen plants. They will be isolated in a special WIP greenhouse at our Georgia facility prior to shipment. This will allow us time for observation studies and the extermination of any and all possible insect pests sometimes found on field grown plants. It will cost us dearly in labor and materials to quarantine our field raised plants. However, we will not compromise your collection or our inventory by allowing natural insect pests and pathogens to freely enter our growing complex.

That would simply be against the WIP creed of "Providing and being the best CP Nursery that we can to meet the needs of todays and tomorrows collectors."

ENJOY THE BEST IN CARNIVOROUS PLANTS FROM WORLD INSECTIVOROUS PLANTS!

# HOW TO PLANT A CARNIVOROUS PLANT TERRARIUM

Setting up your terrarium will be very easy. You need only to consider the basic requirements; humid atmosphere, moist acid soil, pure water, bright light and moderate temperatures. By placing your plants into a converted aquarium or equivalent container, nearly all of the basic requirements will be taken care of by themselves. The only "work" for you will be in regulating the amount of light your plants receive and the moisture level of the soil.

PLANTS If you are new to the hobby, we recommend that you select plants falling into Culture Class 1 and 2 and add more difficult to grow species as you gain experience and confidence. We know that you will want to select one or two Class 3 plants as a few of them are standards among CP collectors. Do not lose interest if you lose a plant. We all have losses once in a while, it is natural. For the bargain hunters, a combination of our Genera and Continental Sundew Collections make an ideal starter collection that is a solid foundation on which to begin a collection. When selecting plants for your terrarium, always take into consideration the mature size of each plant and your available growing space.

CONTAINER A transparent container; glass, plastic or clear fiberglass can equally be used. Most terrarium growers use an aquarium with a glass or plastic top to maintain the humidity. Approximately 10% of the uppermost surface must be removable to provide ventilation. Drain holes in the bottom are not required in carnivorous plant terrariums.

SOIL The preferred soil medium is shredded long fiber sphagnum moss with a depth of 12 cm (5"). If plain long fiber moss is used, you may want to place a thin layer of one to two cm of the shredded form on top to make a clean and smooth looking surface. An underlayment of charcoal or coarse perlite may be provided as a drainage sump but is not a requirement. A mixture of two parts fine silica sand to one part Canadian Peat Moss can be used as an alternate soil medium for nearly all species.

WATER Pure water is a necessity for these plants. In nature, they generally live in habitats of high annual rainfall or along stream banks where a constant Supply of low mineral content water is available. Water high in minerals will eventually alter soil pH and cause a decline in your plants health. Terrarium culture will require very little water as moisture will evaporate and recondense with *very* little loss. Use distilled, deionized, rain or RO (reverse osmosis purified) water. Do not use water that has been softened by a water softener. If you select a soil medium of long fiber moss, you will notice that it is a light tan color when dry. When moistened, it becomes a light chocolate brown color. Maintain the darker color at all times by adding additional water when the moss begins to turn lighter in color. For those selecting a sand-peat medium, proper moisture levels can be tested by pressing a finger into the soil about one cm. If water forms in the indentation, there is too much water. If the soil is crusty, too little. With proper soil moisture, the indentation will partly rebound to the original level.

LIGHT If your terrarium is positioned away from a south or east facing window, you will need to provide additional lighting. Fluorescent lighting is preferred over incandescent because of its wider spectrum and lower heating affects. We have found a two tube fixture with any of the commercially available tubes (cool white, wide spectrum etc.) to work well. Locate the light fixture directly on top of the terrarium and provide a daylength of 16 hours during the months of April to September. Lower this daily total gradually to 8 to 10 hours during December to January and slowly increase to the full amount. Plants requiring dormancy periods will require special attention as mentioned on the individual cultural information sheets. You may decide to put your terrarium outside during the summer months. Place it under a sheltered area that will provide about 50% sunlight and be protected from uninvited admirers (mostly infants and pets).

TEMPERATURES Normal indoor household temperatures are ideal for most carnivores during the active growing season. You will need to consider dormancy requirements for a few of the temperate growing species and be able to provide the cooler conditions for them. Remove only those plants that require a dormancy period in late fall to early winter. Forced growth during dormancy will most likely result in the loss of the plant the following year.

# HOW TO PLANT A CARNIVOROUS PLANT TERRARIUM

SOIL PREPARATION Any soil medium using peat moss or sphagnum moss must be moistened before placement into the terrarium. If you have decided on using shredded or long fiber sphagnum moss, soak it in pure water overnight or until the color changes to the chocolate color. After soaking, partially squeeze out excess moisture and carefully begin to fill the terrarium to the desired level. For sand-peat users, soak the peat moss portion of the mixture before mixing in the silica sand base.

TERRARIUM LAYOUT To create wetter and dryer areas within your terrarium to suit individual species, it is advisable to slope the soil medium on side to another or front to back. The wetter areas being the shallower locations. You may add pre-washed rocks or other ornaments to further enhance the appearance of the terrarium. Before you actually place your plants into their new home, it is suggested to develop a planting location plan taking into consideration the mature size of each plant and to make up small name tags or labels for placement in the terrarium next to each plant.

PROCEDURE OF PLANTING Carefully remove each plant from their individual packages and read the cultural information sheet to begin your familiarity with each species. Make indentations into the medium where each plant is to be place approximating the proper depth for each plant. Carefully insert the root system into the medium and add additional soil to firm up the plant. Add only enough water to remoisten the soil as recently transplanted plants *cannot* absorb excess moisture. If overly wet, they may rot. Provide the recommended light and keep temperatures within the lower limits of the specified range if possible. Dew drops will begin to form on Sundews within the first week and increase till fully established. Venus Fly Traps and Butterworts may take a few weeks to produce new growth and function properly.

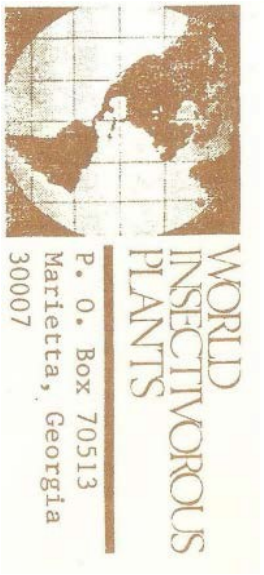
FERTILIZATION Initially, you may decide to provide insect food for your entire collection. As your interest broadens into new and different species or you begin to propagate your plants, finding insect food may become bothersome. We recommend the foliar application at 1/4 strength of a 15-30-15 fertilizer or fish *emulsion* in the same strength every two weeks during the growing season. Do not overly soak the plants, just let the fine spray from a handheld sprayer mist the leaves once. It is best not to fertilize than to over fertilize. You won't be able to create a man eater by fertilizing, just a dead insect eater!

PESTS Yes, not all bugs are consumed by the plants. Aphids can be one of the most troublesome pests. You may decide to use an insecticide, but we ask you to consult us first. We always recommend mechanical removal with tweezers of all unwanted food items in terrarium grown CP.

GENERAL MAINTENANCE You will need to monitor water levels on a weekly basis. Only add water when needed. Old plant growth can be trimmed off to improve the appearance of each plant. Check temperatures periodically during the day and never leave a terrarium exposed to full sunlight.
Join now so you don’t miss the next issue!

**CPN Needs you** **You need CPN**

Now that you have read our catalog, do you long for more information about these intriguing plants? We have only provided you with the basics, yet sound advice on how to get started. You have been given a brief introduction and sampling of the 600 plus species that belong to this bizzare group of plants. The "Carnivorous Plant Newsletter" or CPN, is the world's premier publication on Carnivorous Plants. Each quarterly issue is packed with readers comments, experiences and adventures from the worldwide membership. Scientific articles dealing with the intricate and exacting details of plants and new discoveries are provided from professional botanist and knowledgeable collectors. Each issue is loaded with vivid color photographs of plants in their native habitat and in collections. CPN is the ultimate bargain for the CP hobbyist who yearns for continual excitement and is not content without knowing or having the best.




General Information

Please order all items by using the current WIP Update Form. It is your comprehensive pricing guide for all catalog items and new plant introductions not contained in our yearly catalog.

Due to the delays incurred with shipments and the expense of obtaining plant phytosanitary certificates, we do not ship plants outside of the U.S.A. Books and Plant Seeds are permitted and cleared at inspection/customs stations and we encourage foreign collectors to consider them in-leu of plants.

Sales Policy

We reserve the right to make substitutions when current stock is depleted or fails to meet our shipping standards. Unless otherwise specified, substitute plants will be of our choice and be of equal or greater value to the original order. All request for "No Substitutions" will be honored with a full refund if plants are not available and O/S (Out of Stock) will be written on the shipping invoice. All plant orders are prepared on a first-in, first-out policy. Our normal processing requires one to two weeks during the shipping season (March-October) as we ship to avoid weekend storage with the carrier.

WIP guarantees live delivery of all plants at all times. If for any reason your order arrives in other than acceptable condition, immediately return it to WIP for a plant exchange or check refund.

WORLD INSECTIVOROUS PLANTS highly recommends membership to "The Carnivorous Plant Newsletter" for those who would like to enhance their knowledge in the culture and preservation of Carnivorous Plants. To receive a membership application, either request one from WIP or Write:

ICPS, The Fullerton Arboretum
California State University-Fullerton
Fullerton, California 92634

Catalog illustrations by Ron Fleming depicting mature plant characteristics.

*Denotes name designated by original source or parent stock and used by WIP for reference only. To our knowledge, not an officially accepted botanical name.