Lewisia 'George Henley' is a typical alpine plant forming a 6-inch rosette of fleshy leaves with magenta-red flowers in midsummer. It is listed as a Zone 6 plant, but it has been persistent in my Zone 4b garden.

Drosanthemum hispidum is a close relative to the *Delosperma*, this miniature forms a dense clump of fleshy leaves covered nearly all summer long with purplered flowers.

New and Usual Conifer Cultivars

Jim Smith

Blue Sterling Nursery, Bridgeton, New Jersey 08302 U.S.A.

The term "new" is a relative one when dwarf or garden conifers are involved. When I use the term "new" it will mean popular or newly acquired by the trade, since collectors usually have this material long before it ever makes it into commercial production. Conifers for the garden can come from many sources. They can start from a graft of a witches broom, seed from a broom, a chance seedling, or a sport on a plant. The main thing to keep in mind when talking about dwarf conifers is the length of time something can be referred to as new. We all know of the work that Dr. Sidney Waxman has done at the University of Connecticut on broom seedlings. He has introduced many very nice landscape conifers to the industry. This takes quite a long time evaluating each plant to make sure it has a differing characteristic form the next one and then many more years to distribute to the trade, in some cases it can take 20 years or more. Many of these plants are first evaluated by collectors and shared or traded. Sometimes a selection can be around for many, many years before it is commercially accepted. So the word "new" is also being used as "collector new" and "industry new".

Which then brings up the classification of sizes. The American Conifer Society has established a guide to help eliminate the confusion around the term dwarf conifer. They actually prefer to use "garden conifer".

- **MINIATURE**. Grows less than 3 inches a year or will reach around 2 to 3 ft in 10 years. Example is *Chamaecyparis obtusa* 'Nana'.
- DWARF. Grows around 3 to 6 inches a year or will reach about 3 to 6 ft in 10 years. Example is *Pinus strobus* 'Blue Shag'.
- **INTERMEDIATE**. Will grow about 6 to 12 inches a year or will be about 6 to 15 ft in 10 years. Example is *Chamaecyparis pisifera* 'Gold Thread'.
- LARGE. Grows more than 12 inches a year and will be around 15 ft in 10 years. Example is *Cedrus atlantica* 'Glauca'.

Miniatures are perfect for the trough or patio garden since they will almost never outgrow the space allotted for them. Dwarfs are great in shallow borders or lower level foundation plantings. Intermediates will tend to outgrow the space if not used properly. Large should be used only as specimens or where plenty of room is given.

One thing to keep in mind when landscaping with conifers is to keep the growth rate in perspective. By using the proper plant in the correct location many years of enjoyment can be had.

THE FOLLOWING ARE SOME EXCITING PLANTS

Some are dwarf and some large. Some are new and some are quite old.

Calocedrus decurrens 'Gnome'. Very dense and slower growing than the species.

Cedrus deodara 'Divinely Blue'. A fantastic blue semiprostrate deodar cedar that is growing at the U.S. National Arboretum in D.C. It was named by Don Howse after Bill Devine of Maryland who found it.

Cephalotaxus *harringtonia* **'Fastigiata'.** This old favorite is also making a second hit due to its deer resistance. It was introduced in 1913 from Japan and has dark green foliage with a good upright form.

Cephalotaxus harringtonia **'Korean Gold'.** Here is a great selection from 1984 that was brought back by Barry Yinger, then of Brookside Gardens in Maryland. It is a golden-yellow selection with a dense upright habit. It is still very difficult to find commercially.

Chamaecyparis lawsoniana 'Barabit's Globe'. This is a selection from Elemer Barabitts of Hungary. It has a nice semi-weeping globose-to-later-conical habit with a good silver-blue-green color. It has been in production since 1965.

Chamaecyparis obtusa **'Elmwood'.** Here is a tight compact golden ball that looks fantastic anywhere in the landscape.

Chamaecyparis obtusa 'Repens'. This is an old selection that is also making a comeback. It grows low and wide with a nice dense, close-grouped medium green foliage. It was introduced from Holland in 1949.

Chamaecyparis nootkatensis 'Green Arrow'. Here is a nootka cypress that really makes a statement. The weeping foliage is more bluish than green at least in the east. It has a nice tight, strongly vertical habit that shoots for the sky.

Chamaecyparis obtusa 'Golden Whorl'. It is similar to *C. obtusa* 'Torulosa' but it has a great golden-yellow color year round.

Chamaecyparis obtusa 'Split Rock'. Here we have a nice plant that has the bluest foliage of any Hinoki cypress I have seen to date. It came from Split Rock Nursery in New Jersey around 1983.

Chamaecyparis pisifera 'Curly Tops'. Here is a sport of the well known boulevard cypress that grows into a rounded to conical shape. It has bright blue needles that curl around the stem (similar to *Cryptomeria japonica* 'Spiralis') revealing the silvery underside. It is from Yamina Nursery in Australia and first released in 1989.

Chamaecyparis pisifera 'True Blue'. Here is another new 'Boulevard' type. It will grow into a neat round ball that is quite dense. The color is excellent!

Chamaecyparis thyoides 'Rubicon' (syn. 'Red Star'). This could also be sold as 'Rubicon' but either way it is a real nice upright grower. The foliage changes from a real nice gray-blue-green to a fantastic shade of purple in the fall and winter. This has been around since 1984 as 'Red Star' and 1972 as 'Rubicon', but just became popular in the last 4 years.

Picea abies 'Acrocona'. Here is another old cultivar from around 1890 that exhibits beautiful red cones at the tips of the branches.

Picea abies 'Pusch'. This is a relatively new arrival to the states, found in 1987 in Berlin, Germany. It has the attractive red cones on the tips but it is a dwarf form in all respects.

Picea abies 'Witch's Brood'. This one starts out its life as a flat globe but becomes conical with age. It is very slow growing. It is from the late Link Foster who grew it from a broom seedling and gave it to Don Smith of Watnong Nursery in New Jersey. It has nice light green foliage. Around from 1983.

Picea glauca 'Pendula'. This one is even older but to many that tour our nursery it is a new selection. It is from 1867 and has a bluish gray color and a very nice tight pendulous habit.

Picea omorika 'Hexenbesen'. This one has also been around since 1989 and is quite slow. It will start out as a low globe and then turn into a low broad cone.

Picea omorika 'Minima'. This one is great for the patio or trough garden. The name has been changed to 'Minimax' and it has been around since 1979.

Picea omorika 'Pendula Bruns'. It has very dense tightly pendulous branches that literally hug the trunk. It came from Germany somewhere around 1955.

Picea omorika 'Pimoko'. Here is a selection that was found as a witches broom in 1984. It has a nice globose habit and the two-toned color of *P. omorika*.

Picea omorika 'Treblitsch'. Again this one was found in 1987 in Germany. It is a very compact cushion that is different from other *P. omorika* taxa by having straight branches with a coarse needles that run perpendicular.

Picea orientalis 'Mount Vernon'. This one is an extremely slow-growing, tight bun with dark green foliage. Around since 1985.

Picea orientalis 'Professor Langnor'. It is a very tight miniature selection with light green color. Great for a trough garden.

Picea orientalis 'Silver Seedling'. This one will make a small tree with sulfurwhite foliage. It must have protection from the sun. It grows about 2 to 4 inches per year. A release from Konijn Nursery of Holland around 1990.

Picea orientalis 'Tom Thumb'. Here is a cool miniature that is similar to Mt. Vernon but keeps a great golden-yellow color year round. Introduced by Joel Spingarn in 1990.

Picea pungens 'Glauca Prostrata'. Here is an old favorite making a great comeback. It was around since about 1906 and has great blue color. Its spreading compact habit makes it a winner. Sometimes it can throw a leader that can be easily be pruned back.

Picea pungens 'The Blues'. This is an exciting new weeping form that has fantastic blue color and an excellent weeping habit.

Picea pungens 'Walnut Glen'. Here is a Colorado blue spruce with a nice goldenyellow color on new foliage. It was selected in the U.S.A. in 1985. It does need shade in the afternoon sun or it will burn.

Pinus banksiana 'Schoodic'. Here is one from the Arnold Arboretum in 1979 that has a prostrate mat-like habit with short needles. It is now becoming more popular.

Pinus densiflora 'Oculus-draconis'. The dragons eye pine is also from around 1890 and some people still are not familiar with it so to them it is new.

Pinus densiflora 'Pendula'. This old selection from around 1890 is becoming popular again I feel because it can be used in many locations. It makes a great ground cover or if staked up it will provide the waterfall effect in the garden.

Pinus flexilis 'Campy'. Here is another selection from Jerry Morris. It is very slow growing and is perfect for the patio garden.

Pinus flexilis 'Ririe'. This one is an extreme miniature version of the limber pine. It was found by Jerry Morris in Colorado.

Pinus koraiensis 'Jack Corbit'. This one is a variegated Korean pine with a nice habit. Around since 1986 and still almost impossible to locate.

Pinus mugo 'Mitsch Mini'. It is a very low-spreading plant with twisted green needles and long buds in the winter. Has been around since 1989.

Pinus parviflora 'Cleary'. This is a nice selection that has excellent silver-blue foliage with a nice compact upright habit.

Pinus parviflora 'Tani Mano Uki'. The name means "snow on the mountain". This cultivar makes a nice bush with white variegation on the dark green foliage. The candles in spring also turn a shade of pink and add extra interest. It was a selection from Kristick Nursery in Wellsville, Pennsylvania in 1990.

Pinus resinosa 'Don Smith'. Here is an excellent low-growing dwarf flat-topped form that was found by J. Leonard Bailey and distributed by Watnong Nursery in New Jersey. It has been around since 1984.

Pseudolarix amabilis. This selection is not new, nor is it a dwarf, but I thought I would include it here because so many are not familiar with it. It will become a rather large tree with nice green needles that change to a fantastic golden-yellow fall color. When people see this one at the nursery they always buy some because of the excitement. It was introduced from China around 1919.

Sciadopitys *verticillata* **'Triploid'.** This one has needles that are three times as wide as the species and also has good color.

Thuja plicata 'Doone Valley'. Here is a slow-growing cultivar with a conical habit and golden foliage. It was a selection of R.S. Corley from the United Kingdom in 1970 but is still relatively unknown in the trade.