



# Homestead Gardens

## *Davidsonville, Maryland*

### What Are Shade Plants?

**Characteristics of Shade Plants.** Shade-loving woody **shrubs** and **ground covers**, have these common characteristics. There are normally evergreen (keep their leaves through the winter), shallow-rooted and acid-loving. They are “under-story plants,” that grow on the forest floor, always shaded during the growing season by tall, deciduous trees. They occupy a niche in the forest which is not in competition with their taller neighbors.

These plants grow in the “duff” layer, the top thin layer of the forest floor composed entirely of composted and partially-composted organic matter. They do not have any competition for root space here, but they have had to develop shallow roots to grow in this thin soil. They have also had to develop a tolerance to the highly acid pH levels found in the duff layer. They are evergreen and retain their leaves in winter to capture sunlight and manufacture food during the only time of the year when sunlight is abundant to them – when the deciduous trees are bare. The food that is produced at this time is stored away for use later in the season when the trees have leafed out and thus deny them most of the sunlight.

Shade-loving **perennials** also retain the ability to thrive in very low pH, highly-organic, almost soil-less growing medium. Like the woody groundcover, they are by-and-large smaller than shrubs and therefore are the most shaded plants on the forest floor. They are also most likely to be covered by dead leaves and other organic debris and further denied access to sunlight. Some flowering shade perennials bloom early in spring and have a short season, growing when the trees are just beginning to leaf out, going dormant in early summer.

**Degrees of Shade.** The degrees of shade range from full sun (no shade) to full shade (no sun). There are different plant groups that have adapted to growing in less than full sun, but do not assume this means that all of them need no sun to survive or do well. There are **full shade** plants that prefer very little sun and do well in most-day shade. They are usually plants that have large leaves, have a slow growth rate and whose flowers are almost insignificant in comparison to more sun-loving plants. They may have little tolerance to exposure to bright sunlight for long periods and become stressed in such situations.

Other shade plants are **shade-tolerant** or really do well in a **part-sun** environment. They differ from full shade plants in that they need some sunlight to grow their best. They may be able to do quite well in full shade, but will not perform up to their growing or blooming potential there. For example, azaleas and rhododendrons prefer a mostly shady growing location. But because they flower heavily in the spring, they need a minimum of 4 hours of sunlight each day to bloom well.

There is also a confusion as to the two terms, **part-sun** and **part-shade**. As mentioned above, part sun refers to plants that are mostly shade-loving, but must have a minimum amount of sunlight fall on them daily in order to bloom and grow vigorously. A plant that is a part-shade plant is an otherwise full-sun plant, that for some reason prefers some shade, especially in the heat of summer and in the afternoon. A good example of such a plant would be viburnums grown

in Maryland. Because of the especially hot afternoon sun in the summer, viburnums may suffer stress. Where such hot afternoons are normal, viburnums are less stressed when offered shade in the afternoons. Consequently, they usually grow better than if they were exposed to full, all-day sunlight.

**Types of Shade.** Besides degrees of shade, shade comes in various soil types, as determined by location or climate. A shady location in the garden may have wet, moist or dry soil conditions.

**Wet** and **Moist** shade soils are often found in locations near streams, ponds or bogs. They are also found in poorly drained soils and in climates where ample rainfall and humidity are the norm. The soils there are usually have more organic content and tend to hold moisture better than organic-poor soils. There are also differences between *wet* and *moist* soils. Some plants may tolerate wet (water-saturated) soils, while others prefer damp conditions and may not tolerate water-logged soils well.

**Dry shade** soils be very porous or very hard, either condition affecting absorption or retention of moisture. In many cases, dry shade situations are underneath mature trees that block much of the rainfall from reaching the forest floor and whose surface roots take most of the moisture that does. In the typical landscape setting, dry shade is found in the beds close to the house, where roof eaves prevent rain from falling there.

Although needed various degrees of shade, shade plants also need to be matched to the type of shade that they prefer. For instance, some ferns prefer dry shade, while others prefer moist shade. There seems to be a long-standing presumption that shade is always moist and that all ferns should grow well in moist shade. Some ferns, however, do much better in a dry shade environment and that is where they should be placed.

**The Importance of Winter Sun.** Q: When is a shade plant not a shade plant? A: In the winter. Our shade plants, the evergreen ones, in particular, are shade plants when sun-loving plants are active. Consider the normal location of shade plants. They are under the canopy of deciduous trees, which shade them. But when these trees lose their leaves in the fall, the sunlight now becomes available to the under-story plants. The evergreen shade plants now use this opportunity to manufacture food. This food is stored away for use when the sunlight is denied them when the trees leaf out again. This is one reason for not doing any significant pruning of evergreen shade plants in the late-summer and fall.

There is much more to plants growing in the shade than meets the eye. Knowing why plants tolerate or prefer different places on the light spectrum is an important step in the process of selecting the right plant for the right location.