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| **Table 3.** Relative abundances and importance value percentages (IV %) for dominant or co-dominant overstory tree species associated with goldenseal in Pennsylvania. | | | | | |
| **Scientific name+** | **Common name** | **Relative Abundance** | | | **IV %** |
| **Frequency** | **Density** | **Dominance** |
| *Liriodendron tulipifera* L. | Tulip-poplar | 15.4 | 21.4 | 32.4 | **23.1%** |
| *Acer saccharum* Marshall | Sugar maple | 14.8 | 21.4 | 12.6 | **16.2%** |
| *Juglans nigra* L. | Black walnut | 9.4 | 7.0 | 8.3 | **8.2%** |
| *Quercus rubra* L. | Northern red oak | 6.7 | 5.2 | 11.5 | **7.8%** |
| *Quercus alba* L. | White oak | 6.0 | 6.1 | 4.8 | **5.6%** |
| *Carya cordiformis* (Mill.) K. Koch | Bitternut hickory | 6.0 | 4.8 | 3.4 | **4.7%** |
| *Prunus serotina* L. | Black cherry | 4.7 | 3.5 | 4.0 | **4.1%** |
| *Carya ovata* (Mill.) K. Koch | Shagbark hickory | 4.0 | 3.9 | 3.1 | **3.7%** |
| *Carya glabra* (Mill.) Sweet | Pignut hickory | 4.7 | 3.5 | 2.3 | **3.5%** |
| *Carya tomentosa* (Poir.) Nutt. | Mockernut hickory | 3.4 | 3.1 | 3.1 | **3.2%** |
| *Tilia americana* L. | American basswood | 4.7 | 3.1 | 1.5 | **3.1%** |
| *Acer platanoides* L. | Norway maple | 2.0 | 3.1 | 3.5 | **2.9%** |
| *Fraxinus americana* L. | White ash | 2.7 | 2.2 | 2.8 | **2.6%** |
| *Ulmus rubra* Muhl. | Slippery Elm | 2.7 | 2.2 | 1.5 | **2.1%** |
| *Fraxinus pennsylvanica* Marshall | Green ash | 2.0 | 1.3 | 1.2 | **1.5%** |
| *Quercus montana* Willd. | Chestnut oak | 2.0 | 1.3 | 0.7 | **1.4%** |
| *Pinus strobus* L. | Eastern white pine | 2.0 | 0.9 | 1.1 | **1.3%** |
| *Magnolia acuminata* L. | Cucumber tree | 1.3 | 1.3 | 0.5 | **1.0%** |
| *Fagus grandifolia* Ehrhart | American beech | 1.3 | 0.9 | 0.8 | **1.0%** |
| *Fraxinus nigra* Marshall | Black ash | 1.3 | 0.9 | 0.7 | **1.0%** |
| *Robinia pseudoacacia* L. | Black locust | 0.7 | 1.7 | 0.2 | **0.9%** |
| *Picea abies* (L.) H. Karst. | Norway spruce | 0.7 | 0.4 | 0.5 | **0.5%** |
| *Prunus avium* L. | Bird cherry | 0.7 | 0.4 | 0.5 | **0.5%** |
| *Tsuga canadensis* (L.) Carrière | Eastern hemlock | 0.7 | 0.4 | 0.3 | **0.5%** |
| +All taxonomy follows Weakley, 2023. | | | | | |