

Commercial Asparagus Production

Asparagus is a high-value, early season perennial vegetable crop. Locally produced asparagus is available in the northern United States from late April – June.

Most asparagus is sold as fresh produce, direct to consumer through roadside markets, farmers markets, local retailers, CSA, and pick-your-own. Asparagus is an excellent source of early income prior to strawberries and other traditional vegetable crops. The annual consumption of asparagus has increased in recent years to 1.6 lbs. per person in 2016. Asparagus is a low calorie nutritious vegetable; high in iron, fiber, and vitamins C and A. One cup of asparagus contains 3 grams of protein.

FUNDAMENTALS

Our recommendations are based on experience working with growers identifying best practices for commercial asparagus production. It is best to prepare the site well before planting. Remove perennial weeds. Asparagus performs best at a pH of 7.2 or higher. Test soil to ensure correct pH and balanced soil fertility. Some growers till in fertilizer prior to creating furrows. Any fertilizer applied within the furrow should be incorporated into soil prior to planting. For lighter, well-drained soil, a furrow depth of 8" is recommended; 6-8" on heavier silt loam or clay soils. Roots should be placed flat in the bottom of furrow and covered with 2-3 inches of soil. Once plants have emerged and you have full stand, use cultivation sweeps to fill in the furrow. Note that furrow must be level after settling so slight mounding may be necessary depending on soil type. In general, irrigation is not necessary for asparagus production unless you are in dry conditions. Growers have been installing drip irrigation as a systematic water source in event of these conditions with good success.

PESTS AND DISEASES

During the harvest period, manually pull weeds so emerging spears are not injured. If tilling the soil during the growing season, only till ½-1" of the soil surface as deep tilling can damage crowns and bring weed seeds to surface. Be on the lookout for asparagus beetles and their larvae, aphids, and the asparagus miner. Stemphylium and powdery mildew are 2 fungal diseases that infect ferns, affecting production in the next year. Contact your local Cooperative Extension office for chemical weed and pest control recommendations.



MAINTENANCE

Mow old ferns with a rotary mower in early spring, as this can aid with weed control. After mowing, this also can be time for fertilizer and herbicide application. Fertilization rates should be based on needs outlined in periodic soil tests. Growers have two application options. Some growers perform one application in early spring after mowing ferns. A second option is splitting the application between early spring and directly after last harvest. For weed control, we suggest applying pre-emergent material prior to spear emergence and burn off any post emergent weeds directly before harvest. Many growers have found no-till as a cultural practice, for weed control very beneficial as it can eliminate potential damage to the crown through cultivation. We also suggest consulting the Cornell Integrated Crop and Pest Management Guidelines for Commercial Vegetable Production (which can be purchased at store.cornell.edu) and your local Cooperative Extension office for a selection of recommended herbicides for your state.

HARVEST

Research shows you can harvest asparagus the year after establishment for 7-14 days and for 3-4 weeks on year 2 depending on spear diameter. In the third year, you can harvest for the full season, typically 6-8 weeks.

Information used to write portions of this article can be found in *Asparagus Production—From A to Z*. By Carl J. Cantaluppi, Jr., is a comprehensive guide about planting, growing and marketing asparagus, including a budget with costs and expected income per acre. It is available for \$27.50 (+shipping) at noursefarms.com or by calling (413) 665-2658.

