CASE STUDY: GARLIC

Susan Harwood grows organic garlic at Valery on the mid north coast of New South Wales.

Susan has two hectares of her own property and leases another hectare from a neighbour. Her average crop is 1.2 tonnes per annum, which is small compared to larger producers of up to eight tonnes. The garlic production started as a small enterprise but now is Susan's main source of income and she also works off-farm as an assistant to an oyster grower. Susan works with her brother and she also employs casual labour seasonally, such as harvest time. The enterprise is certified with ACO (Australian Certified Organic)

Each paddock of crop is part of a rotation: one year garlic; two years sheep grazing on native pasture with vetch or cow peas used as a green manure crop.

Figure 50: Garlic growing through the mulch of paddock grasses

Photographs courtesy Susan Harwood

The garlic is grown in compost that is made on the farm from grass slashings, chicken litter, household scraps, lime and blood and bone.

Virgin soil was deep ripped, but that is not necessary again after the first crop is planted. Before the bulbs are planted certified products may be added according to soil test results; products used provide minerals such as phosphorus, boron, sulfur and nitrogen. Lime is applied to the soil once each three years when the garlic is planted, to coincide with the crop rotation. The soils pH has lifted from 4.3 to 5.5 after two applications of lime (six years).

Figure 51: Harvesting garlic

In March, the bulbs are planted onto the soil (mechanically) and then covered with mulch to a depth of about 30 cm; it is essential to have the mulch cover before the bulbs shoot, within two weeks of planting. If necessary in mid winter, the crop is watered once per week. When the flowers appear in mid October they are snapped off so that the food stores of the plant concentrate in the bulbs. The crop is harvested in November and December by using an onion lifter that cuts the roots away from the bulb and then collecting the bulbs. The roots are left to add organic matter to the soil.

The harvested garlic is *tailed* (tops and any remaining bits of roots are cut off) and bundled into groups of eight and then hung to dry over bamboo poles in a shed for a month. Susan's shed is designed to use natural north-easterly airflow and so she doesn't need driers. It is important to have very dry garlic for the Darwin market so that it is not spoiled by mould during transport and storage.

Disease. The most likely reason why Susan's garlic is free of disease is that she uses her own seed stock. Her plants are strong and healthy with good, deep root systems and this also probably keeps the plants free from disease.

Weeds. The mulch suppresses most weeds and any weeds that appear between the rows of garlic are *spot weeded* and dug out.

Producers can buy *No Spray Zone* signs from Bellingen Shire Council; the signs are placed outside the property at the side of the road so that Council workers know not to apply sprays in the area. Susan also removes weeds such as Parramatta Grass, on the roadside near her property if they are likely to be noticed by Council workers.

In addition to the crop production Susan is actively involved in Mid North Coast Organics Incorporated. This group is forming a marketing company for organic and biodynamic produce; the company will help growers prepare and distribute products for market and also establish markets. The company intends to supply local, interstate and international markets.