## **Recommended Species**

## Perennial Irrigated Species:



Alyssum (*Lobularia maritima*) 1-3 lb/seeded acre

Alyssum is a perennial flowering plant that grows 8 to 12 inches tall and is used by some orchard growers to provide beneficial insect habitat and flowering diversity. These non-native species from the Mediterranean are commonly used in the landscaping trade and are easily adapted to orchard floors that are mowed. Alyssum lives for several years and flowers as early as February the first year and year round thereafter. Due to the high cost of seed only a small amount is needed when mixed with other perennial species.



Yarrow (Achillea millefolium) 2-4 lb/seeded acre

Common yarrow is a California native that is found throughout California. It is a perennial herb, often found along roadsides and ditch banks. It has a spreading or low growing stature when mowed and can be 2-3 feet tall if left unmown. Orchard growers primarily plant it as a small amount in mixtures to provide flowering habitat for beneficial insects. The flowering clusters at the ends of the stem branches flower during spring and summer.



White Clover (*Trifolium repens* L.) 5-12 lb/seeded acre

White clover is similar in habit and growth to strawberry clover but is less invasive and may attract fewer pocket gophers because of its smaller taproot. It tolerates a wide range of soil conditions and thrives best under cool, moist growing conditions; it is also shade tolerant once established. It performs better in heavy, moist soils than on sandy soils that may be droughty and contain less nutrients. White clover cultivars are arbitrarily classified by size of the plants: small, intermediate, and large. The small types often have "wild white" in their names. Intermediates types often include the term New Zealand or "common"; most unnamed U.S. cultivars are intermediate types. The large type was introduced from Italy into the U.S. in the early 1900s. Seed derived from this ecotype were designated Ladino until the early 1950s, when new cultivars were developed in the U.S.



Strawberry Clover (*Trifolium fragiferum* L.) 10-15 lb/seeded acre

Strawberry clover is a long-lived perennial that roots at the nodes of stolons and grows year-round. It tolerates saline and alkaline soils, wet or submerged soils, infrequent irrigation, and frequent close mowing. When established, it often out competes weeds and is useful for erosion control. However, it is very invasive, competes with vines for water, is very resistant to most herbicides, and attracts pocket gophers. The cultivar 'Salina' is well adapted to California conditions; it was developed in California from selections of 'Palestine', a productive Australian cultivar.



Chewings fescue is one of the red fescue cultivars that have been developed and introduced for use in turf. Chewings fescue is a noncreeping bunchgrass that produces a firm sod. It is frequently included into fine leaf fescue mixtures to provide cover until more sod forming cultivars, such as creeping red fescue can become established.

Chewings Fescue (*Festuca rubra* var *commutata*) 20-25 lb/seeded acre



Creeping Red Fescue (*Festuca rubra*) 20-25 lb/seeded acre

Creeping fescue is also one of those cultivars that have been developed and introduced for use in turf. Creeping red fescue spreads by short rhizomes. It has been used extensively through out California orchards and vineyards for thirty years and provides an excellent sod floor for mown and irrigated orchards. Creeping red fescue is often mixed with perennial ryegrass for rapid establishment.



Perennial Ryegrass (Lolium perenne) 25-35 lb/seeded acre

Perennial ryegrass is a short-lived (3 to 4 years) perennial bunchgrass that is frequently used in lawns. Of the many cultivars, 'Elka,' a short-statured cultivar, had been most frequently used in cover crop mixtures. It grows well in heavy soils but needs a large amount of extra water. Although it is similar to tall fescue in growth and management, it is less aggressive and not as well adapted to poor or submerged soils.



Ryegrass/Fescue Mixtures 25-35 lb/seeded acre

The most frequently planted mixture of grasses that is planted in California is a 75/25 % mixture of perennial ryegrass and creeping red fescue, respectively. This mixture has been marketed by Germains Seed Company as 'Companion' cover crop for 30 years and many variations are sold by other seed companies. Once this 'lawn' is established it provides a durable, long-term floor for orchard operations in prune production. The additional advantages include a cooler environment, improved water infiltration, and year round orchard access. Because the grass mixture does use up to 30% more irrigation and nitrogen, it must be managed properly for the prune crop.

The written text descriptions have been taken from *Cover Cropping in Vineyards, A Growers Handbook*, Ingels et al., UC DANR Publication 3338.