



Beneficial Blend Seed Mix

PO Box 1555, Ventura, CA 93002
800-248-2847 * 805-643-5407 * fax 805-643-6267
questions bugnet@rinconvitova.com
orders orderdesk@rinconvitova.com
web www.rinconvitova.com

Beneficial Blend is a seed mixture that yields a wide variety of plants known to harbor beneficial insects. One method of attracting predators and parasites is to provide a food source such as some aphids. Providing nectar, pollen and/or a little aphid honeydew also increases longevity of beneficials and may improve their reproduction.



Many of the components of Beneficial Blend's grain, legume and flower seed mixture are very susceptible to insect pests--this keeps pests off the nearby crop concentrating the food source for beneficials. Some of the plants used are also susceptible to common plant diseases, however the stand is never affected all at once. Beneficial Blend has a certain amount of tall plants, such as cereal ryegrass and mustard, to catch aerial spiders and provide structure for webs.

Eighteen Diverse Plant Species that Bloom Sequentially

Cereal ryegrass, barley, subclover*, common vetch, yellow blossom sweet clover, white blossom sweet clover, crimson clover*, LM 331 alfalfa*, mustard, carrot, coriander, baby's breath, buckwheat, baby blue eyes, bishop's flower, fennel, celery white yarrow, sweet alyssum.
*All small legume seeds are inoculated with Rhizo-Kote to assure effective nitrogen-fixing nodulation.

Tolerates and Improves Most Soil Types

Rincon-Vitova's Beneficial Blend has excellent drought resistance and tolerance for variable, low fertility soils with high or low pH and non-tillable, compacted soil. It is good for soil building and erosion control.

Planting Instructions

A light planting rate of 10 lbs/acre will establish 2-4 plants of each species on a square foot. In orchards and vineyards only one row of the Blend out of every 8-10 rows is needed to provide the beneficials a place to live where the planting will not be disturbed or mowed.

In field crop situations Beneficial Blend should be planted on the borders and row ends as a barrier to incoming pests. A program for pest management with cover crop interplantings is described in a new manual "CEC Naturfarm Conversion Project: IPM Using Pest Break Strips for Insect Pest Management."

The Beneficial Blend should be planted 1/4 -1/2 inch deep in a good , fine seed bed since many flower and herb seeds are small. Broadcasting and ring rolling or using a billion seeder are

preferred methods of planting. Drilling is the next best method, ensuring that the small seeds are not planted too deep. Fertilizer should be applied on infertile soil types, such as sand or shale. On loam soils fertilizer is not necessary because the objective is a diversity of plants and not an abundance of plant material. Planting dates are between October 1 to November 15.

Management:

After planting, Beneficial Blend is not normally mowed or disced. It will sometimes have a sparse weedy appearance as different plant species flower and mature during the season. Partial mowing might offer some advantage in concentrating beneficials and also reducing woody material which sometimes attract a lot of lygus bugs. Mowing or discing should always start farthest away from the Beneficial Blend row and mow or disc toward the row over a period of several days. This allows time for the mower to herd insects into the blend rows for protection. At least half of the planting should always be left to stand as tall as possible, unless the planting interferes with cultural operations or harvest.

A well established stand will reseed and can last several years which will add vigor to the perennial and biennial plants in the blend. Irrigation is desirable to extend the period of bloom, however a dryland planting will also be productive until it exhausts the soil moisture.

Evaluation and Testing

The components of Beneficial Blend were planted at Kearney Agricultural Center of the University of California and vacuum collections indicate high populations of insects and beneficials. Dr. Robert Bugg and others from the Sustainable Agriculture Program have established the value of many of the plants in the mix. Dr. Bugg's recommendations are followed in each year's upgrade of the formulation.

References:

- Altieri and Schmidt, "Cover crops affect insect and spider populations in apple orchards". *Cal Agriculture*, Jan-Feb, 1986, pp 15-17.
- Bugg, "The Ecology of Cover Crops," 1994. UC-SAREP, Davis, CA FAX 916-752-8550.
- Dietrick, Phillips and Grossman, "CEC Naturfarm Conversion Project: IPM Using Pest Break Strips for Insect Pest Management," 1995. Nature Farming Research and Development Foundation, Lompoc, CA. FAX 805-736-9599.