Sustainable Dry Bean Production

Current Topic

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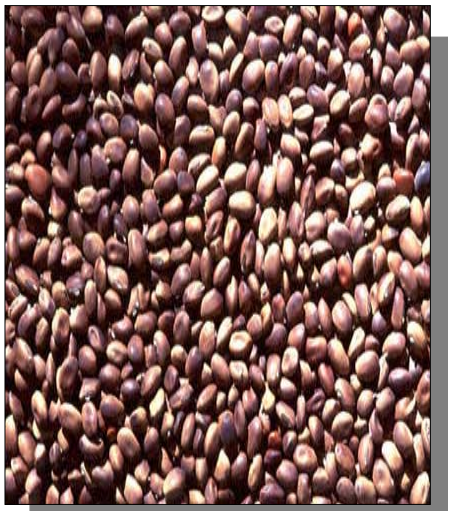
Sustainable farming systems rely on crop rotations, crop residues, animal manures, legumes, green manures, off-farm wastes, mechanical cultivation, mineral-bearing rocks, and biological pest control to maintain soil health, supply plant nutrients, and minimize insects, weeds, and other pests. Sustainable approaches to farming do not necessarily exclude herbicides, pesticides, or chemical fertilizers, but these tools are used only after other management options have been considered.



Like other crops, dry bean production can be more or less environmentally sustainable, depending on which practices are used. For example, if tillage creates and maintains bare ground, erosion and depletion of soil organic matter will result. The core component of a sustainable system is building and conserving soil. The principles of sustainable farming are covered in three ATTRA publications: *Sustainable Soil Management*, *Principles of Sustainable Weed Management for Croplands,* and *Making the Transition to Sustainable Farming*. These are all available on request; just call our toll-free phone line.

Enclosed is an excerpt on dry bean production from *The Alternative Field Crops Manual* developed by Minnesota and Wisconsin Cooperative Extension. It contains comprehensive agronomic production information, including fertility and pest management. Also enclosed is a comprehensive dry-bean production guide from North Dakota.

Reduced-chemical weed control is often the most challenging aspect of sustainable production. The foundation of a good weed-control program is a crop rotation that breaks weed life cycles. Rotating beans with winter-annual cereals and a sod crop, such as pasture, is an example. To allow the beans to get a head start on the weeds, plant thick stands and use narrow row spacing. Reduced herbicide options include reduced rates, banding in the row and cultivating the middles, and spot spraying. Articles on mechanical weed control, herbicide banding, and crop rotations are enclosed.

Several of the enclosed articles provide variety information. Ask your local county Extension agent for varieties suited to your area. Your state agriculture department proabably has a seed section or division that regulates the seed industry in the state. For example, in North Dakota this agency is called the State Seed Department, is led by a seed commissioner, and is located in Fargo. Most of these agencies publish a list of seed producers and distributors and what they sell in a given state.

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A bean-related organization, the USA Dry Pea and Lentil Association (1), publishes a newsletter for its members. The newsletter reports market demands, currently available tonnage, and pulse-crop producers' activities in the United States, Canada, and Turkey. This organization may be able to help you establish contacts with research scientists or producers in your area.

The Nebraska Dry Bean Growers Association (2) publishes a quarterly newsletter called *The Bean Bag*, which has a variety of information on dry beans. The Association's primary activities include education, staying abreast of legislative issues that affect the dry-bean industry, and research on dry-bean production and processing. They also hold two major meetings each year. One is a field day where the latest equipment and field research are demonstrated and the second is a "Bean Day" annual meeting held in January. Anyone in Nebraska who grows dry beans, or owns land where dry beans are grown, is automatically a member of the association.

The enclosed section from *Alternative Field Crops Manual* discusses markets for dry beans. It gives typical price ranges and mentions that many farmers forward-contract part of their crop just as grain producers do. Good marketing information is available from the USA Dry Pea and Lentil Council (1) and the Nebraska Dry Bean Association (2).

References

1) USA Dry Pea and Lentil Council
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Enclosures

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The electronic version of **Sustainable Dry Bean Production** is located at:
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http://www.attra.org/attra-pub/PDF/drybean.pdf