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Seed Balls

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³Assistant Professor, Government College of Agri-business Management, Kashti Malegaon, Dist. Nashik (M.S) **SUMMARY**

A seed ball (or seed bomb) is a seed that has been wrapped in soil materials, usually a mixture of clay and compost, and then dried. Seed balls are considered as the boon for forest restoration. Essentially, the seed is 'pre-planted' and can be sown by depositing the seed ball anywhere suitable for the species, keeping the seed safely until the proper germination window arises. Seed balls are an easy and sustainable way to cultivate plants in a way that provides a larger window of time when the sowing can occur. They also are a convenient dispersal mechanism for guerrilla gardeners and people with achy backs.

INTRODUCTION

Every plant you know, started somewhere, either as a cutting or as a seed or any other form. Seeds are the final product of a plant and are the beginning of life for another. Their mode of distribution varies, with some being manually planted, with others being migrated by humans or other birds and animals, and others being dispersed off by air. Seed balls are uniquely made to be dispersed off in a bit of a controlled manner and give life to new plants. This article discusses seed balls in detail, particularly understanding what seed balls are, how to make them, how they work, what they are used for, and a few facts about them. Seed balls or seed bombs are seeds that have been wrapped in soil matter and then dried. The soil matter is often a mixture of clay and compost. The seed is, therefore, pre-planted and can be sown by depositing the seed ball anywhere as long as the species can survive there. The wrapping mixture keeps the seed safe until it can properly germinate.

Seed balls are one of the easiest and sustainable ways of cultivating plants to win a manner that avails a larger window of time until the sowing window comes. Seed balls are also the best and most convenient way of dispersing seeds for guerrilla gardeners as well as those with achy backs. With seed balls, you can propagate plants and trees from seeds, without the need for opening the soil with cultivation tools like a plough. Today, seed balls are fun for green-minded kids and adults and are also an important tool of the guerrilla gardening movement.



History

Seed balls may have been used by the Ancient Egyptians to seed the receding banks of the Nile after annual floods. They have been used in Asia and elsewhere, especially in arid regions, because of their ability to keep the seeds safe until conditions are favourable for germination and the ease at which they can be distributed. In the Carolinas in the 1700's, West African slaves, predominantly women, were brought in to cultivate rice using a seed ball technique that was used in Africa. More recently, Japanese agricultural renegade, Masanobu Fukuoka, began exploring the use of seed balls to help improve food production in post-World War II Japan. His research and outreach efforts has brought the seed ball back into the public eyein the early twentieth century.

How to Make Seed Balls?

Ingredients needed: You need 5 parts pottery clay mix, 2 parts potting soil, 1-2 parts water, and 1-2-part seeds of your choosing. You will also need a large tub to mix the ingredients and a large box to dry and store the seed balls. Seed balls are made from mixing fine textured clay, compost and seeds of our choice. You may choose to add compounds found in capsicum, artemia, black pepper, mints and alliums, as they deter insects from opening the balls and eating the seed. First, you will mix the soil, clay, compost and 1-part water thoroughly. You should ensure there are no lumps. Slowly add more water until the mixture is consistent. Next, you will add the seeds. Keep kneading the dough until the seeds are well mixed in., if necessary, add more water. Then, take small bits of the clay mixture and roll into a ball about one inch in diameter. The balls should hold together easily and if they are crumbling, add more water. With the balls rolled, place them in a large box and let them dry for 24-48 hours in a shady place. You will then move them into a cardboard box for storage. Never store them in plastic bags. Finally, sow them by either placing them over the area to be planted or toss them one at a time. The tossing part is fun and you can get as creative as you want. Do not bury them and neither should you water them.

How Do Seed Balls Work?

- The dried clay shell protects the seed from common predators such as mice, birds and ants. It keeps the seed in protective care until it starts germinating.
- During germination, the ball itself will contain nutritious minerals or humus, which helps the seed germinate.
- The chili powder or compoundshave a strong odor that deters predators as the seed ball slowly degrades and the seed continues to sprout.
- The seedwill germinate given the conditions are favourable and is native to the area. when sufficient rain permeates the clay casing, the seed will germinate
- Sowing with seed balls, you do not need to water, or pit holes for planting them.
- They do not germinate immediately. They require some patience.
- You do not need to scatter them immediately after they have dried up. If placed in a cool and dry place, it can be stored for a couple of years.

Uses of Seed Balls

- It is possible to reintroduce tree species that have partly or completely been removed from their original environments through seed balls.
- Planting wildflowers which are vital during pollination by bees.
- Preparation of seed balls and their plantation by kids will act as a teaching source for them. At the same time importance of trees to environment and humans can be explained very easily with great fun and joy.
- Apart from protecting the grain from birds, the seed ball protected it from floating away once the fields were flooded. It is actually a perfect way of planting plants that would otherwise be disturbed while in the germination or pre-germination period by natural forces or predators.
- Seed balls can be used to enrich a neglected area, like roadsides as well as abandoned lots, thereby enhancing the biodiversity of plants or vegetation.

CONCLUSION

Planting trees, although satisfying, is hard work as it requires pitting holes, clearing weeds, watering and pruning. Additionally, you need permission to plant trees on land belonging to others. However, with seed balls, all you need to do is have the seed balls in your possession and throw them. They do not require the pitting,

weeding or the permission required by planting tree seedlings. It can, therefore, get everyone involved, including people of all races, ages and classes, even if they are not gardeners themselves.

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