

Green Belts

This method involves planting trees and herbaceous plants and other vegetation on the bare land, the edges of fields, and at the base of slopes. These plantings help to slow water flow, trap soil particles in muddy water, and prevent the runoff of red soil.

- Green belts, along with green manure and mulching[※], are commonly implemented methods to prevent red soil runoff. They are an essential countermeasure for sources of red soil runoff in farmlands.
- Green belts not only reduce red soil runoff but also prevent soil from farmland from falling into ditches. They are said to reduce red soil runoff by approximately 50%.
- In Okinawa, plants such as vetiver grass, shell ginger, lilyturf and mondo grass are used as green belt plants.

※Mulching: This is a method used to prevent red soil runoff on agricultural lands. It involves covering the surface of the field with plant litter such as Japanese sliver grass, which helps suppress soil erosion.

Plants suitable for Green Belt



Vetiver Grass



Shell Ginger



Lilyturf



Mondo Grass

Points to consider when selecting plants for a Green Belt

• Requires Minimal Planting Area

Select plants that do not require large planting areas and can effectively prevent red soil erosion even in small areas.

• Moderate Height and Size

Select plants that do not grow too tall or develop large branches and leaves, ensuring they do not block sunlight for crops.

• Versatile Growth Conditions

Select plants that can thrive in various conditions, allowing for flexible planting locations.

• Easy Propagation and Management

Look for plants that can be propagated through methods such as division and can be easily pruned if they grow excessively.

• Evergreen and long-lasting Plants

Prefer plants that maintain their leaves year-round to ensure continuous effectiveness in preventing red soil runoff.

• Utilitarian Value

Select plants that provide additional benefits, such as use in perfumes, medicinal benefits, or ornamental flowers.

How to plant?

- **Planting Technique**

Planting using pot-grown seedling is the most common practice.

- **Note**

To reduce red soil runoff during the planting season, the amount of tilling is minimized (till only the areas where the pot-grown seedlings will be planted).

When to plant?

Green manure (field surface vegetation) is sown after crops are harvested and the field becomes bare soil. This prevents red soil runoff. Before planting the next crop, the green manure is tilled into the soil.

