

**NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE STANDARD**

CONTOUR ORCHARD AND OTHER FRUIT AREA

(Acre)
Code 331

DEFINITION

Planting orchards, vineyards, or small fruits so that all cultural operations are done on the contour.

PURPOSE

To reduce soil and water loss, to better control and use water, and to operate farm equipment more efficiently.

CONDITIONS WHERE PRACTICE APPLIES

On sloping land where soil and water losses need to be controlled, especially if a permanent cover is not established.

SPECIFICATIONS

Contour orchards will reduce soil and water losses when compared with orchards not on the contour.

Careful layout of contour guidelines is necessary for land being planted to citrus, coffee, banana, plantain, mango, avocado, papaya, or other fruit crops since they will occupy the land for relatively long periods. Hillside ditches can also be used as guidelines for the contouring. In the absence of hillside ditches, the guidelines will normally be provided on the true contour at each major slope change.

Soil type, undulations on the field, distance between rows and cultural practices for the crop being produced will determine the practical limitations for spacing of the rows and adherence to a true contour. Most applicable orchards crops and land conditions in Puerto Rico will permit reasonable variations from the true contour. These variations should not exceed 3 percent for more than 100 feet in any one direction, except when hillside ditches are

used as guidelines and the ditch grade of the hillside ditches will prevail. The rows should normally have a grade no greater than 2.5 percent. The steeper grades are applicable only where conservation tillage system and similar conservation practices are used. RUSLE should be used to determine appropriate length of slopes.

Maximum use of conservation tillage system and good crop residue management along with grassed waterways for water disposal will help make contouring of tropical fruit crops more effective for erosion control.

Reduce water budget, especially on volume and rates of runoff and infiltration. Decreases in surface runoff and increases in infiltration with any benches, hillside ditches or terraces constructed to provide access to growing plants. Consider type of bench, hillside ditch or terrace (inward sloping versus outward sloping), width, degree of slope, and vegetative cover at the time of runoff.

Reduce soil erosion and the movement of sediment, and soluble and sediment-attached substances carried by runoff. Slightly increase the volumes of soluble nutrients, pesticides, and salts contained in infiltrating waters.

OPERATION AND MAINTENANCE

Requires minimal operation and maintenance. All farming operations, including tillage and planting should follow the same grade of guidelines. Protect trees from wild fire. Control competing weeds by cultivation or prescribed herbicide and/or pesticide that applies, until trees are tall enough to shade the weeds.

Conservation practice standards are reviewed periodically, and updated if needed. To obtain the current version of this standard, contact the Natural Resources Conservation Service.