

'Tropic Lalo' Paspalum
Paspalum hieronymii Hack.

Robert J. Joy and Peter P. Rotar

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CONTENTS

Introduction	3
Origin	3
Description	3
Use	4
Adaptation	4
Methods of Establishment	5
Insects and Diseases	5
Management	5
Availability of Planting Materials	7

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'TROPIC LALO' PASPALUM PASPALUM HIERONYMII HACK.

Robert J. Joy and Peter P. Rotar

INTRODUCTION

This paspalum cultivar is a cooperative release by the United States Department of Agriculture, Soil Conservation Service, and the University of Hawaii, Hawaii Institute of Tropical Agriculture and Human Resources, Department of Agronomy and Soil Science.

ORIGIN

'Tropic Lalo', originally from Brazil, was introduced to Hawaii in 1968 by the USDA, Soil Conservation Service, Hawaii Plant Materials Center, by way of the National Plant Materials Center, Beltsville, Maryland.

DESCRIPTION

'Tropic Lalo' is a low-growing, rapidly spreading, stoloniferous grass that usually grows to a height of about 12 inches (30 cm); however, it may reach a height of 24 inches (60 cm) under moist, fertile conditions. It produces many stolons, which readily root at the nodes to form a dense, sodlike turf. The abundant leaves are linear in shape, approximately 3 to 9 inches (7.5 to 20 cm) long and 1/2 inch (1.25 cm) wide. The leaves and stems are covered with coarse hairs about 1/16 to 1/8 inch (1.5 to 3 mm) long. The flowering stems are semi-erect and from 12 to 24 inches (30 to 60 cm) high, depending upon soil fertility. Seed production is sparse with about 1 to 2 percent viable seed.



Figure 1. Newly opened ground planted with 'Tropic Lalo' paspalum and overseeded with annual ryegrass, which has recently sprouted, for a quick cover until 'Tropic Lalo' is established.



Figure 2. 'Tropic Lalo' paspalum, near Honokaa, used as a residential lawn at 2400 ft elevation.

USE

'Tropic Lalo' is intended primarily as a ground cover for erosion control in orchards, waterways, roadsides, and other erosion-prone areas. It will trap large amounts of sediment when grown in waterways. It is a low-maintenance plant with a dense growth habit that crowds out weeds and requires infrequent mowing. When mowed frequently (weekly or biweekly) it becomes matlike and makes a coarse but very desirable and acceptable turf for lawns, etc. Its stolons are tough and coarse; hence it will tolerate fairly heavy use from wheeled equipment and foot traffic. It is palatable and is readily grazed; however, it is not recommended as a pasture plant because of its slow regrowth.

ADAPTATION

'Tropic Lalo' is adapted from sea level to over 3000 feet (900 m) in Hawaii in areas with an annual rainfall of 40 to over 100 inches (1000 to 2500 mm). If irrigated, it will grow well in drier areas. It is adapted to a wide range of soil conditions—from coarse to fine-textured and from strongly acid to slightly alkaline conditions (pH 4.5 to 7.5). It is somewhat tolerant of low-lying soils that tend to stay wet, but not waterlogged, and of infertile soils. It does not tolerate long, dry periods. It is quite resistant to water erosion. It is tolerant of 50 to 60 percent shade, but its growth is slower and it forms a less dense mat under shaded conditions.



Figure 3. 'Tropic Lalo' paspalum, near Laupahoehoe, used as a cover for in-field access roads. It provides excellent cover under traffic and requires little or no maintenance.

METHODS OF ESTABLISHMENT

'Tropic Lalo' is established from sprigs (stem cuttings) planted on grids varying from 12 × 12 inches up to 36 × 36 inches (30 × 30 cm to 90 × 90 cm). Sprigs may be broadcast and lightly covered with a disk or planted in furrows from 1 to 3 or more feet apart. The minimum planting rate should be no less than 40 bushels of sprigs or stolons per acre (28 kl/ha). Higher rates may be required in closer spacings. In plantings of 12 × 12 inches, complete cover may be achieved in as little as 6 weeks. The area to be planted must be moist or be irrigated as the cuttings, sprigs, and young, newly established plants are susceptible to drought. Land preparation beforehand may be minimal with either spraying with an herbicide or disking, or both, to control weeds; however, a well-prepared seed bed is preferred. Weeds, which may be a problem until the grass is established, may be controlled by frequent mowing or by the use of a light application (less than

half the normal rate) of paraquat followed by fertilization with urea.¹

INSECTS AND DISEASES

'Tropic Lalo' can be damaged by the grass webworm *Herpetogramma licarsialis* (Walker). So far, there have been no reports of significant damage due to plant pathogens in Hawaii.

MANAGEMENT

'Tropic Lalo', being low growing, will need infrequent mowing unless it is used in situations that require a closely cut turf such as a lawn or a cover in macadamia nut orchards. According to evaluation trials in rather diverse environments, it may be necessary to mow it from six to 30 times a year,

¹Use pesticides safely. Follow the label or contact your State Cooperative Extension Service or State Agricultural Experiment Station personnel for additional information.



Figure 4. 'Tropic Lalo' paspalum, near Laupahoehoe, used for ground cover on a dual-purpose waterway and roadway.



Figure 5. 'Tropic Lalo' paspalum, in North Kohala, used as a lawn. Compare the regrowth of 'Tropic Lalo' in the foreground, mowed two weeks ago, with that of kikuyugrass in the background, mowed three weeks ago.



Figure 6. 'Tropic Lalo' paspalum, in Kona district, used as a ground cover in a papaya orchard. The ground cover has not been mowed or irrigated since it was planted.

depending upon use and location. It may be cut to less than 1 inch (2.5 cm), as it recovers well and will make excellent cover.

It will respond to fertilizer nitrogen at rates up to 200/lb/acre/yr (224 kg/ha/yr) of urea; however, once established, it requires only low maintenance, and fertilizer applications may not be necessary. In orchards it should obtain sufficient nutrients from the fertilizer used for the trees. It may be grown in association with, and obtain its nitrogen from, legumes such as white clover (*Trifolium repens*), big trefoil (*Lotus pedunculatus*), the desmodiums (*Desmodium* spp.), etc.

'Tropic Lalo' has been compared to hilograss (*Paspalum conjugatum*), 'Pensacola' bahiagrass (*Paspalum notatum*), seashore paspalum (*Pas-*

palum vaginatum), and kikuyugrass (*Pennisetum clandestinum*). It is slower growing and requires less maintenance than kikuyugrass. It is faster growing than bahiagrass, does not grow as tall, and provides better cover. It provides better cover than hilograss and is adapted to a wider range of environments than seashore paspalum, which is primarily used around brackish water.

AVAILABILITY OF PLANTING MATERIALS

The SCS Plant Materials Center, Hoolehua, Molokai, Hawaii, will maintain a block of 'Tropic Lalo' paspalum. Vegetative material will be available to commercial growers and others interested in establishing production fields.

DISCLAIMER

Reference to a company or product name does not imply approval or recommendation of the product by the College of Tropical Agriculture and Human Resources, University of Hawaii, or the United States Department of Agriculture to the exclusion of any others that may be suitable.

NOTE: As part of a structural reorganization, the Hawaii Agricultural Experiment Station and the Hawaii Cooperative Extension Service have been merged administratively under the name **HAWAII INSTITUTE OF TROPICAL AGRICULTURE AND HUMAN RESOURCES**, College of Tropical Agriculture and Human Resources, University of Hawaii at Manoa.

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