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Leaf Morphology of Brazilian Spinach (*Alternanthera sissoo*) as a Backyard Vegetable

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A B S T R A C T

The utilization of backyard gardens to fulfil family food by the Indonesian people needs to be developed, along with fulfilling nutrition during the Covid-19 pandemic. One of the plants that have the potential to grown is Brazilian spinach (*Alternanthera sissoo*). References on the morphology of Brazilian spinach are still limited, so it is necessary to observe the plant organs. This study aims to determine the leaf morphology of Brazilian spinach as vegetables in backyard gardens. Morphological observations of this spinach leaves were carried out visually at the Integrated Laboratory of the Agroecotechnology Department, Faculty of Agriculture, Lambung Mangkurat University, in August 2020. The results showed that Brazilian spinach has a herbaceous with a simple leaf in a deltoideus shape (*deltoideus*). It has tapered leaf tips (*acuminatus*); acuminate leaf base (*acuminatus*); wavy leaf margin (*repandus*); and simple palmate leaf venation (*palminervis*). The arrangement of its leaves is *folia decussate*, that is, in each nod has two leaves that emerge opposite each other.

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INTRODUCTION

Plant introduction is an essential part of an agricultural expansion to widening the plant's beneficiary to capacious society across the world (Suryadi *et al.*, 2004; Pyšek, *et al.*, 2004). The spread of coffee beans and potatoes to the whole world is a successful example of plant introduction.

Recently, a kind of vegetable widely known as Brazilian Spinach (*Alternanthera sissoo*) is being imported and introduced to some Southeast Asian countries, such as Malaysia and Indonesia exactly. We can find the hype of this type of vegetable on social media, on Instagram, and on various Indonesian e-commerce such as Tokopedia, Bukalapak, Shopee, etc. There we can find easily high

demand for this Brazilian spinach from the buyers that most home garden lovers. The determination of plant commodities on home gardens, especially in urban areas, is very noteworthy. In addition to fulfilling family food and nutrition, the commodities planted also meet aesthetic values so that they look beautiful when planted around the residence. One of the plants that can fulfill food and has aesthetics value is Brazilian spinach (Toensmeier, 2007; Tregenza, 2016). Brazilian spinach leaves are part of the plant that can be consumed and have a beautiful shape.

In this covid-19 pandemic period, the demand for Brazilian spinach is getting high on the market. It is because they have more time to stay at home (Thesiwati, 2020). Unfortunately, this hype of Brazilian spinach introduction in Indonesia has not fulfilled with enough scientific