Potential of Small-Seeded Fava Bean Varieties for Cover Crop.

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Legumes, including fava bean (*Vicia faba*) have been increasingly used as a cover crop in agricultural systems due to their ability to biologically fix atmospheric N. However, successful introduction of a new cover crop fava bean variety is dependent on the feasibility to produce seed at a low cost – therefore requiring high seed yield. The purpose of this study will be to gather data on seed yield and agronomic quality of eight fava cultivars over a two year period. The first variety trial was planted on December 10, 2021 in a randomized complete block design consisting of eight varieties replicated in three blocks for a total of 24 plots. Each 10 x 10 ft plot contained 80 seeds planted into 4-row plots with a row spacing of 2.5 ft and a seed spacing of 10 in. The trial will be rainfed then moved to drip irrigation as needed. Measurements will be taken on total above biomass, below ground biomass and seed yield by weight and number of seeds per pound on a varietal basis. Data will also be collected across multiple developmental stages.