

Abstract

The purpose of this study was to study and select new varieties of roses from abroad at on-Farm trial level that are suitable for production for highland communities. To test and select the new rose puffer that is suitable for planting in the Royal Project area and meets the needs of the market. By using the Holland roses that have been imported since 2015, tested in 2 sets, First set has 5 color groups, namely red flowers, white flowers, light pink flowers, bicolor flowers or two/tone groups and dark pink groups of 3 varieties, total 15 varieties. Planted in comparison with the original trade varieties in each color group, tested in 2 real extension areas: Inthanon Royal Agricultural Station and Mae-Tho Royal Project Development Center. For the second set of roses, there are 4 groups of colors, including white flowers, light pink flowers, white flowers trimmed and the group of peach flower, 2 color varieties, total 8 varieties, planted in comparison with the original trade varieties in each color group at Pangda Royal Agricultural Station.

Experiment 1: Growth and yield of roses that were selected in 5 color groups, 15 varieties in the rainy season and winter season in the actual planted conditions were studied. From the study of the two seasons, roses can be selected in each color group. By using growth criteria on vegetative growth (Number of branches/plants and plant height) Quality of yields (bud size, bloom size and number of petals) and outbreaks of rose pests and diseases (aphids, red spider mites, gray mold, powdery mildew and downy mildew) and assessment of acceptance from relevant parties (RPF's staffs, farmers and customers). Can summarize the selection results as follows: The Red flower group selected "Red Crown" and "Formidable" varieties for planting in the Royal Inthanon Agricultural Station area and the Mae -Tho Royal Project Development Center, which is better than the original "Royal Baccara" trade variety. The white flower group selected "Avalanche" and "White Soda⁺" varieties for planting in the Inthanon Royal Agricultural Station area and selected "Avalanche", "Dolomiti" and "Santorini" varieties for planting in the Mae-Tho Royal Project Development Center area. It was found that the original "Avalanche" trade variety was the best qualified. Light pink flowers selected "Sweet Dolomiti" for planting in the area at Inthanon Royal Agricultural Station and selected "Sweet Avalanche" and "Pink Avalanche" for planting at the Mae-Tho Royal Project Development Center, which is found to be better than the "Titanic", which is the original trade variety. Bicolor/two-tone flower group selected "Candy Avalanche⁺" and "Sorbet Avalanche⁺" for planting both in the Inthanon Royal Agricultural Station

and the Mae-Tho Royal Project Development Center, which found that both varieties had better properties than the original “Dolce vita” trade variety. The dark pink flower group selected “All 4 Love” and “Cloud⁺” for planting in the area at Inthanon Royal Agricultural Station and the Mae-Tho Royal Project Development Center. By finding that these varieties have better properties than “Eliza”, which is the original trade varieties. From the study of all 5 flower color groups as a result of education during the rainy and cold season only, the selected varieties still need to test the real market, so it can be recommended to be a suitable variety for the promotion and promotion of the market to be more accurate and clear.

Experiment 2: Study the growth and yield of 8 groups of 4 color roses in the rainy season and winter season at Pang-Da Royal Agricultural Station was studied. From the study of the two seasons, roses can be selected in each color group. By using growth criteria on vegetative growth (number of branches / plants and plant height), quality of yields (bud size, bloom size and number of petals) and outbreaks of rose pests and diseases (aphids, red spider mites, gray mold, powdery mildew and downy mildew) and assessment of acceptance from relevant parties (RPF’s staffs, farmers and customers), can summarize the selection results as follows: The white flower group selected “Ice Bear” as the best qualified variety due to the higher number of branches / plant in both seasons, having the best plant height, quality of yields and pest and disease tolerance and both season and the highest satisfaction score, which is better than the original “Avalanche” trade variety. The light pink flowers selected “Lovely Dolomiti” as the best qualified variety because they have the highest number of branches and are the highest in the winter, with the best quality of every yield and disease and insect tolerance, which is better than the “Titanic” variety that the original trade varieties and have a higher satisfaction score than other varieties. The group of white flowers trimmed selected “Jumilia” variety is the best qualified, due to the number of branches /plants, plant height, and quality of the best yields in all two seasons and has a very satisfactory score, which is better than the original “Dolce vita” trade varieties that are tolerance to disease and insects similar. The peach flower group selected “Peach Avalanche⁺” is the best qualified varieties because of the number of branches/plants, plant height and quality of yields in all aspects, both seasons and have the highest satisfaction score, which is better than the original “Royal Princess” trade varieties, but has similar tolerance to diseases and insects. From the study of all 4 groups of flowers, only the results of the study during the rainy season and the winter season, selected varieties still need to test the real market. Therefore, it can be recommended to be a suitable species for the promotion and promotion of the market to be more accurate and clear.