

**PEACH FLOWER BUD THINNING BY DORMANT SEASON APPLICATIONS OF VEGETOIL™**

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Removal of flower buds, flowers or young developing fruit in early spring increases potential peach fruit size by reducing competition for stored carbohydrates. Peach growers often wait ~ 30 days after full bloom to start hand-thinning fruit, which can limit potential fruit size. Experiments were conducted in University and commercial orchards in S.C. to determine the efficacy of Vegetoil™ (VO), an emulsified soybean oil adjuvant, for pre-bloom thinning of peach cultivars. Cultivars were sprayed in January or February of 2003, 2004, and/or 2005 using rates of 8, 9, 10 and 12% by volume of the percentage of soybean oil (i.e., 93%) in VO. Dormant oil at 2 or 3% was the control treatment. Bloom was either delayed or advanced by VO depending on cultivar and year. VO significantly reduced the number of live flower buds at bloom in some cultivars in some years. VO also significantly decreased hand-thinning costs and for some cultivars improved fruit size and commercial pack-out. Although pre-bloom VO treatments were variable in efficacy, in every year that treatments were applied in grower orchards, one or more of the dormant Vegetoil™ applications significantly increased net returns for the grower in that orchard. VO performed similarly but not always the same as vegetable grade soybean oil (SO) pre-mixed with an emulsifier. Rubyprince and Fireprince cultivars were easier to thin with VO and SO than were Goldprince, Summerprince, and Cresthaven.