

Spur survival: Difference between cultivars

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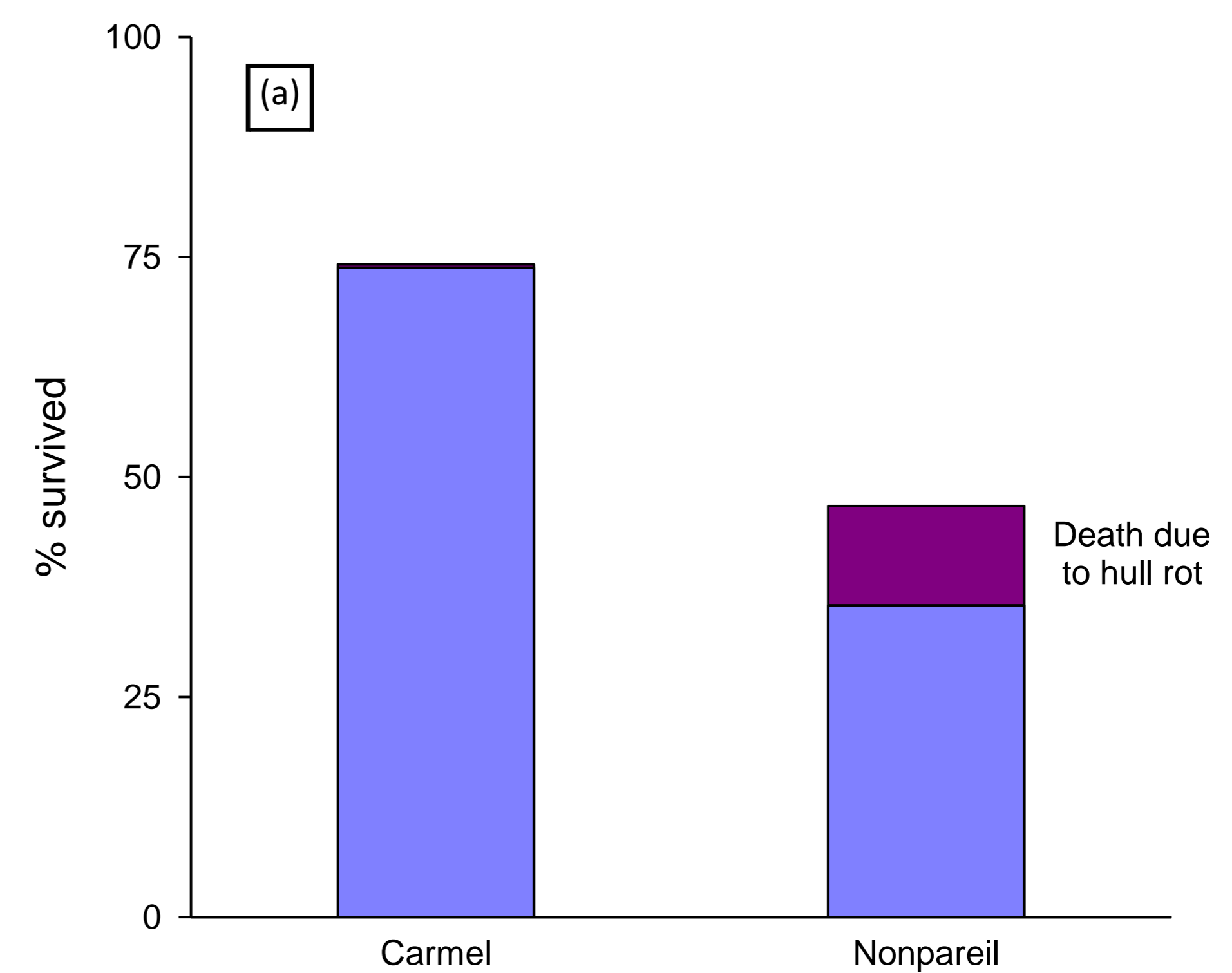
Almond orchard productivity ultimately depends on producing the same (or more) fertile spurs per ha each season. Cultivars, tree training and pruning, and water and nutrient management that promote spur survival and fertility are, therefore, desirable.

By tracking the fate of individual spurs over multiple years we aim to describe the factors that influence a spur's longevity, and to develop better ways to manage orchards.

When a random selection of spurs (different ages, locations within the canopy, and water and nitrogen supplies) were followed through the 2015/16 season, 74% of Carmel spurs survived compared with 35% of Nonpareil spurs.

About 10% of Nonpareil spurs died due to hull rot damage, but this did not explain the difference in survival rate between spurs.

Growing large canopies (or pruning) to encourage fruiting wood in current production systems is likely to have arisen as a technique to overcome Nonpareil's poor spur survival. New varieties may need different canopy management.



a) The annual rate of survival of Carmel and Nonpareil spurs. Death due to hull rot shows the maximum rate of survival if hull rot had not occurred.



b) A Nonpareil spur with three floral buds, and (c) a similar Nonpareil spur, dead after one season.



d) A Carmel spur showing peduncles of nuts grown in past seasons. Carmel spurs were almost twice as likely to survive from season-to-season than Nonpareil spurs.

Accessibility

If you would like to receive this publication in an accessible format, please telephone DEDJTR, Agriculture Research and Development's Dr Dave Monks on 03 5051 4500.

This project has been funded by Horticulture Innovation Australia Limited using the almond industry levy and funds from the Australian Government with co-investment from the Victorian Department of Economic Development, Jobs, Transport and Resources (DEDJTR).