Plum ([Prunus salicina Lindl. (syn. Prunus triloba Roxb. or Prunus thibetica Franch.]), commonly known as chinese plum or japanese plum, is a diploid (2n = 2x = 16) fruit tree native to China. It is one of the most important stone fruit crops in the world (Bhutani and Joshi, 1995). The total world production of plums was 10,776,232 t in 2009, of which 5,372,899 were produced in China (Potter, 2012). China also has rich plum germplasm resources, which are attributed to a long history of natural and artificial selections for fruit yield and quality as well as for adaptation to a wide range of ecological conditions (Liu et al., 2007). ‘Naili’ and ‘Furongli’ are two groups of famous landraces in Fujian Province (Zhang and Zhou, 1998), located on the southeast coast of China. ‘Naili’ was described in ancient Chinese books as ‘Ba Min’ (Zhang, 2008). ‘Hua Nai’ and ‘Qing Nai’ (Qiu and Tong Zhi’ in Song Dynasty in 1214 and ‘Pu wannai’ but 2 weeks earlier than P. salicina ‘Wickson’, ‘Santa Rosa’, ‘Laroda’, and ‘Oishi Wase’. Fruit is heart shaped with convex apex (Fig. 1C). It is initially green (134C) (Fig. 1C) and maintains the yellow color after harvest (Fig. 1H). Compared with ‘Wickson’, also a yellow-fruit cultivar (Karp, 2015), the convex apex of ‘Crown’ is more pronounced, the fruit at harvest are slightly larger, and fruit mature 3 weeks earlier. The average weight of a fruit from unpruned trees is 62 ± 5.2 g. A fruit from pruned trees is 88 ± 10.5 g, which was greater than fruit weights of ‘Qing Nai’ and ‘Hua Nai’ (Table 2). The outermost surfaces of the fruit are covered with a thick epicuticular wax layer. The fruit’s shallow symmetric sutures are similar to those of ‘Wickson’. The flesh is yellow (7B), tender, translucent, and juicy. The fresh of ‘Qing Nai’ and ‘Hua Nai’ (Fig. 1E) and maintains the yellow color after harvest (Fig. 1F). Fruit of its parental plant ‘Qing Nai’, however, is green yellowish (142D) (Fig. 1G) and stays as green yellowish after harvest (Fig. 1H).

‘Crown’ flowers 2 weeks later than ‘Cuipin-
period showed fruit nutritional values as follows: total soluble solids: 15.1 ± 0.5 °Brix; total carbohydrate content: 10.80%; monosaccharides: 6.40%; disaccharide: 4.30%; titratable acidity: 0.83 ± 0.1 g/100 mL, which was mediated by malic acid; and the average juice pH: 3.15. The values were not significantly different over the years or locations (Chen et al., unpublished data). On the other hand, total soluble solids of ‘Qing Nai’ and ‘Hua Nai’ were 12.7 ± 0.4 and 11.4 ± 0.3 °Brix, and titratable acidity for the two are 0.92 ± 0.2 and 1.04 ± 0.3 g/100 mL (Table 2), respectively. ‘Crown’ can be stored up to 25 d at 25 °C (Fig. 1F) without deterioration. The fruit maintains its firmness and juiciness under standard cold storage conditions (0 to 1 °C) for 7 months.

Table 1. Phenological stages of *Prunus salicina* ‘Crown’ grown in Gutian County, Fujian Province, China.\(^*\)

| Yr  | Flower bud sprout | Bloom start | Full bloom | End of bloom | First cycle of fruit drop | Second cycle of fruit drop | Fruit ripening | Leaf fall |
|-----|-------------------|-------------|-----------|-------------|---------------------------|----------------------------|---------------|----------|
| 2012| 23 Feb.           | 7 Mar.      | 16 Mar.   | 28 Mar.     | 2 Apr.                    | 20 Apr.                   | 27 May        | 24 Nov.  |
| 2013| 22 Feb.           | 8 Mar.      | 18 Mar.   | 31 Mar.     | 5 Apr.                    | 22 Apr.                   | 28 May        | 26 Nov.  |
| 2014| 28 Feb.           | 13 Mar.     | 22 Mar.   | 3 Apr.      | 8 Apr.                    | 26 Apr.                   | 5 June        | 28 Nov.  |

\(^*\)The observations were made from 2012 to 2014 for 3 years.

\(^*\)Preharvest physiological fruit drop.

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Fig. 1. New plum cultivar Crown (*Prunus salicina*) is a mutant selected from a ‘Qing Nai’ plant in the village Xiyan, Gutian County, Fujian Province, China. (A) Leaves are purple when they begin to appear and gradually become green, (B) a plant with heavy white flowers before leaf emergence, (C) the fruit is heart shaped with convex apex, (D) abundant green fruit, (E) fruit became yellow at maturation, (F) fruits stored up to 25 d at 25 °C without deterioration, (G) green yellowish fruit on parental plant ‘Qing Nai’, and (H) the fruit of ‘Qing Nai’ stays green yellowish color after harvest.
Integrated pest management practices have been recommended to control pest problems, including cleanup of orchard in winter, timely pruning or burning of infested branches, leaves, and small trees, and spraying of lime sulfur. The oriental fruit moth can be prevented using frequency vibration insecticidal lamps.

Two important traits separate ‘Crown’ from the other cultivars. The first is the early maturation. Since fruits are harvested before 10 June, the early harvesting naturally avoids attacks of the oriental fruit fly. Oriental fruit flies oviposit on fruit. Larvae damage fruit and other organs of plants. Larvae damage also causes fungal or bacterial infection. This fly can be responsible for up to 65% fruit drop and damage caused by tropical cyclones during the typhoon season from the end of June to September in Fujian coast. In addition, ‘Crown’ has no longitudinal dehiscent problem, which significantly enhances its marketability.

‘Crown’ is highly productive in Fujian. The average yield is 9 kg for 3-year-old trees and 30 kg for 5-year-old trees. The tendency for biennial bearing was not observed.

### Availability

Small numbers of rooted cuttings or budwood can be obtained from Prof. Dr. Faxing Chen at the College of Horticulture, Fujian Agriculture and Forestry University, Fuzhou, China.

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