Table S1 The main pests and economic values of "six trees

Scientific name and authority	Economic values	Major Lepidoptera pests	Other major pests	References
Areca catechu L. (Arecales: Arecaceae)	*A. catechu* is extensively cultivated in Hainan Province, China, and has become the leading industry in the region. It is one of Hainan's important tropical cash crops, with unique local characteristics and advantages. In recent years, the *A. catechu* industry in Hainan has undergone transformation and upgrading, with a focus on scientific planting management. The industry is now gradually moving towards a complete industrial chain layout, covering planting, primary processing, deep processing and sales.	*Opisina arenosella* (Xyloryctidae); *Tirathaba rufivena* (Pyralidae)	*Brontispa longissima* (Coleoptera: Chrysomelidae); *Rhynchophorus ferrugineus* (Coleoptera: Curculionidae)	[1-3]
Cocos nucifera L. (Arecales: Arecaceae)	Coconut has long been a significant cultural symbol of Hainan, having been cultivated for over 2000 years. It accounts for 99% of the country's coconut planting area, with an annual output of 260 million coconuts. The coconut industry in Hainan benefits from a fully developed industry chain. Coconut meat and water are used to produce coconut milk, while coconut shells are used for coconut carving crafts or activated charcoal production. Coir is used to make mattresses. Additionally, the industry offers healthy and fashionable products such as coconut oil, coconut lipstick, coconut masks, and activated charcoal made from coconut shells.	*Opisina arenosella* (Xyloryctidae); *Upalamides cyparissias* (Castiniidae)	*Oryctes rhinoceros* (Coleoptera: Scarabaeidae)	[4–8]
Hevea brasiliensis (Willd. ex A. Juss.) Müll. Arg. (Malpighiales: Euphorbiaceae)	Statistics show that Hainan is the largest natural rubber production base in China, with rubber planting area and dry rubber production accounting for more than half of the country's total. *H. brasiliensis* is a versatile material that can be used to produce a wide range of products, including rubber tendons, gloves, car tires, rain shoes, rubber hoses, rubber pillows, engine shock absorbers, civil construction materials, and even military equipment.	*Buzura suppressatia* (Geometridae)	*Eotetranychus sexmaculatus* (Acarina: Tetmnychidae)	[9–12]

Dalbergia odorifera T. Chen (Family: Fabaceae)	As of December 2021, the planting area of *D. odorifera* exceeds 130 thousand acres, providing a natural advantage for industrial development. *D. odorifera* has various uses, including the production of Chinese furniture, strings, and incense pillows, as well as medicinal purposes. In recent years, *D. odorifera* related products, such as tea, honey, wine, and thread incense have been introduced to the market.	*Apocheima cinerarius* (Geometridae); *Porthesia similis* (Lymantriidae); *Plecoptera subpallida* (Noctuidae)	*Aristobia hispida* (Coleoptera: Cerambycidae)	[13,14]
Camellia oleifera Abel (Ericales: Theaceae)	The *C. oleifera* is an ancient woody oil plant, one of the world's four major woody oil plants, along with oil palm, coconut and olive. Its tea oil has high nutritional value and is recommended by the International Food and Agriculture Organization as a healthful edible vegetable oil, often referred as the "Oriental olive oil". Additionally, it can be used to make *C. oleifera* soap and skin care products.	*Euproctis pseudoconspersa* (Lymantriidae); *Biston marginata* (Geometridae); *Casmara patrona* (Oecophoridae)	*Curculio chinensis* (Coleoptera: Curculionidae); *Bacchisaatritarsis* (Coleoptera: Cerambycidae)	[15–17]
Aquilaria sinensis (Lour.) Spreng (Malvales: Thymelaeaceae)	*A. sinensis* is a type of incense and valuable medicinal herb that has been used for thousands of years worldwide. In recent years, Hainan has expanded the planting area of *A. sinensis*, optimized aroma-setting technology, and cultivated excellent varieties of *A. sinensis*. This has promoted the comprehensive development of *Aquilaria* cultivation, processing, medicine, commerce, tourism, and other related industries.	*Heortia vitessoides* (Crambidae)	*Dyspessa monticola* (Coleoptera: Cossidae); *Anoplophora chinensis* (Coleoptera: Cerambycidae)	[18, 19]

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