

Herbicides Enable Thousands of Asian Farmers to Gain Income from Oil Palm Trees

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Oil palm is a tropical perennial tree originating in West Africa. Oil palm fruit resemble large reddish plums clustered in large bunches. Bunches are continuously harvested throughout the year as they ripen on each tree every 7-10 days. Palm oil is extracted from the pulp of the fruit and palm kernel oil from the kernel. Trees are productive for 20-30 years. Only a few decades ago oil palm was a minor crop, but in 2004, production surpassed that of soybean as the major world vegetable oil crop. Malaysia and Indonesia lead the world in oil palm production, accounting for 80% of global production. The vast majority of Malaysia's 200,000 smallholders grow oil palm using herbicides for weed control.

Herbicides represent the largest use of pesticides in oil palm growing, accounting for 91% of all chemicals [1]. Herbicides are regularly applied in immature oil palm plantings. Older palms with a wider canopy do not need regular application of herbicides because the canopy prevents sunlight from reaching the ground and thus retards weed growth [2]. Herbicides are used to keep circles around the palms free from weeds to ensure the successful establishment of the crop. This allows the loose fruit, which is an indicator of bunch ripeness, to be clearly seen and harvested in a timely manner. Uncontrolled ferns and weeds with thorns would interfere with harvesting, which is done manually. Herbicides are used to keep paths clear to assist with inspections and to allow the harvesters easy access to the palms [1].

References

1. Page, B. and S. Lord. 2006. The oil palm industry's approach to the use of pesticides in Papua New Guinea. *The Planter, Kuala Lumpur*. 82(958):13-21.
2. Halimah, M., Y.A. Tan and B.S. Ismail. 2005. The fate of fluroxypyr in the soil in an oil palm agroecosystem. *Weed Biology and Management*. 5:184-189.



Oil palm tree infested with ferns



Fern control in oil palm



Oil palm treated with herbicides



Herbicide around oil palm tree