

***STATUS OF BSR DISEASE INCIDENCE IN
OIL PALM PLANTED BY SMALLHOLDERS
(UNDER TSSPK) IN SABAH AND SARAWAK***

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INTRODUCTION

- **MPOB has conducted a survey of BSR disease incidence in Malaysian oil palm estates including plantation groups, government agencies and independent estates.**
- **As the results, 3.71% of the *Ganoderma* disease was reported and the estimated yield losses amounted to RM 1.5 billion. The *Ganoderma* disease was detected in all age of palm and also all soil types including coastal, lateritic, peat and inland.**
- **MPOB conducting a ground survey of BSR disease in oil palm planted by the smallholders in Malaysia, under the Skim Tanam Semula Sawit Pekebun Kecil (TSSPK).**

Methodology

- **Ground survey of *Ganoderma* disease in oil palm smallholders were conducted by the MPOB officers including in Peninsular, Sabah and Sarawak. The survey was started in 2011.**
- **Palm ages; > 25 years old planting.**
- **Based on the visual symptoms, the oil palm smallholder with BSR disease was recorded as presence (1) and without disease symptoms as absent (0). Visual BSR disease symptoms:**



District	Total area of oil palm smallholders (ha) (2011-2016)	Area affected with Ganoderma disease (ha) (2011-2014)	Area affected with Ganoderma disease (ha) (2015-2016)	Total area affected with Ganoderma disease (2011-2016)	Disease Incidence (%) (2011-2016)
Beaufort	1,810.15	135.0	50	185	10.2
Beluran	475.74	103.0	0	103	21.6
Kinabatangan	1,846.52	8.67	50	58.67	3.2
Kota Belud	18.67	3.73	0	3.73	19.9
Kota Kinabalu	-	-	-	-	-
Kota Marudu	104.57	42.0	0	42	40.1
Kuala Penyu	38.44	0	0	0	0
Kudat	141.13	16.94	0	16.94	12
Kunak	875.30	150.0	0	150	17.1
Labut Sugut	2,685.00	0	10.94	10.94	0.41
Lahad Datu	2,841.96	275.5	165.85	441.35	15.5
Papar	43.21	0	0	0	0
Penampang	-	-	-	-	-
Pitas	1399.36	59.34	0	59.34	4.24
Ranau	76.70	0.53	0	0.53	0.7
Sandakan	2202.10	227.4	5	232.4	10.5
Semporna	395.45	59.4	20	79.4	20.1
Tamparuli	-	-	-	-	-
Tawau	1,815.90	279.8	0	279.8	15.4
Telupid	130.79	10.5	0	10.5	8
Tongod	154.00	24.5	0	24.5	15.9
Tuaran	-	-	-	-	-
Total	15,785.92	1,396.31	301.79	1698.1	10.75

BSR disease incidence in oil palm smallholders planted in Sabah (2011 – 2016)

District	Number of smallholders (2011-2016)	Oil palm smallholders with Ganoderma disease (2011-2014)	Oil palm smallholders with <i>Ganoderma</i> disease (2015-2016)	Total oil palm smallholders with <i>Ganoderma</i> disease (2011-2016)	% of smallholders with BSR (2011-2016)
Beaufort	486	21	30	51	10.49
Beluran	128	34	0	34	26.56
Kinabatangan	465	2	19	21	4.51
Kota Belud	5	1	0	1	20
Kota Kinabalu	-	-	-	-	-
Kota Marudu	25	7	0	7	28
Kuala Penyu	6	0	0	0	0
Kudat	42	4	0	4	12.9
Kunak	93	28	0	28	3.11
Labut Sugut	234	0	20	20	8.55
Lahad Datu	829	55	165	220	26.53
Papar	8	0	0	0	0
Penampang	-	-	-	-	-
Pitas	45	8	0	8	17.78
Ranau	6	1	0	1	16.67
Sandakan	487	32	9	41	8.42
Semporna	95	6	5	11	11.58
Tamparuli	0	0	0	0	0
Tawau	456	35	0	35	7.68
Telupid	60	3	0	3	5
Tongod	25	5	0	5	20
Tuaran	-	-	-	-	-
Total	3495	242	240	490	14.02

Number of smallholders with BSR disease in Sabah (2011 -2016)

Division	Total area of oil palm smallholders (ha) (2011-2014)	Area affected with Ganoderma disease (ha) (2011-2014)	Area affected with Ganoderma disease (ha) (2015-2016)	Disease Incidence (%) (2011-2014)
Kuching	42.44	0		0
Samarahan	109.09	0		0
Sri Aman	186.58	15		8.01
Betong	30.6	0		0
Sarikei	0	0		0
Sibu	20.81	0		0
Mukah	0	0		0
Bintulu	49.19	0		0
Miri	770.15	120		15.58
Limbang	0	0		0
Kapit	0	0		0
Total	1,208.86	135.00		16.81

BSR disease incidence in oil palm smallholders planted in Sarawak (2011 – 2014)

Division	Number of oil palm smallholders (2011-2014)	Oil palm smallholders with BSR disease (2011-2014)	Oil palm smallholders with BSR disease (2015-2016)	% of smallholders with BSR (2011-2014)
Kuching	2	0		0
Samarahan	40	0		0
Sri Aman	41	7		17.1
Betong	7	0		0
Sarikei	0	0		0
Sibu	3	0		0
Mukah	0	0		0
Bintulu	9	0		0
Miri	135	48		35.6
Limbang	0	0		0
Kapit	0	0		0
Total	237	55		23.21

Number of Smallholders with BSR disease in Sarawak (2011 -2014)