



**PLANT PROTECTION EQUIPMENTS**

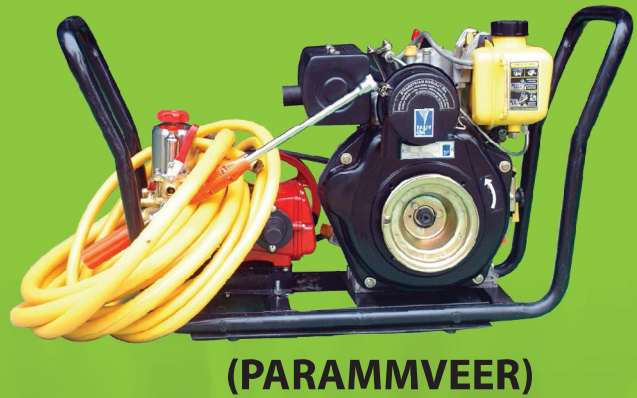
# ***Mist Blowers Power Sprayers***

By "Vijay Villiers"

**3 HP(Petrol-Kerosene / Diesel)  
HTP SPRAYER**



(CB 31)

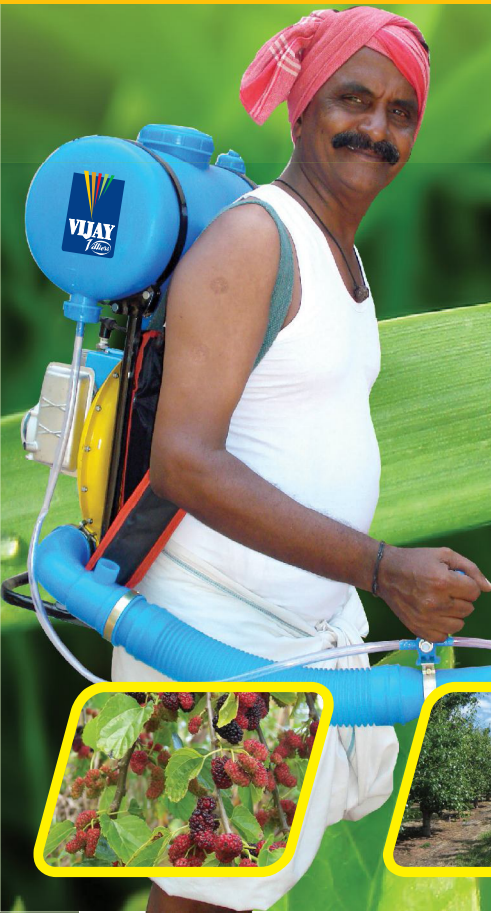


(PARAMMVEER)

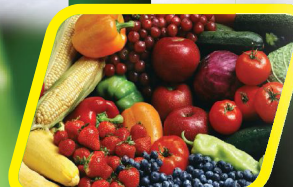
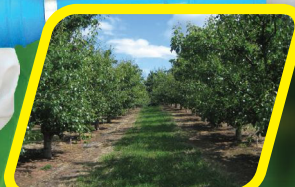
**Uncomparable  
Performance**

**Economical &  
Easy to Operate**

## ***CS 37 SPRAYER***



Service & Spares Support  
Low Cost Spare Parts  
6 Months Warranty  
Dependable Quality  
Strong Dealer Network  
Mask For Protection  
Ear Flap





**TM SOUTHERN AGRO ENGINE PRIVATE LIMITED**, a household name in portable engines and agri equipments is more than 14 years old company. It commenced its commercial production of petrol engine under the technical collaboration with Villiers limited, U.K., the Pioneers and global leader in portable engines. Today, the company has a pan India presence through a strong network of distributors & dealers. Southern agro enjoys a strong brand presence in the international market too. Being an ISO 9001 : 2000 certified company, it is committed to maintain global manufacturing standards and state-of-the-art research & development center.

**WORLD CLASS TECHNOLOGY:** Apart from the technical and managerial support from group companies, The engines are manufactured in our state of the art manufacturing unit in Chennai. Thus assures you the best sprayers are coming from the experts in engine manufacturing.

**SUPERIOR QUALITY SPRAYERS:** We offer you superior quality power sprayer for your varying needs. We provide total solution on both engines & sprayers. And supporting with a nationwide service network which are easily accessible which make availability of economically priced spare parts that's giving you an added advantage.

#### TECHNICAL SPECIFICATIONS OF ENGINES

Type	Paramveer Diesel	CB-31	CS-37
	Single Cylinder, Vertical, 4-Stroke, Aircooled Constant speed, DI Diesel Engine	4 Stroke, Single Cylinder, Side Valved, aircooled engine	2 Stroke, Single Cylinder, engine
Bore	70 mm	68.5mm	35 mm
Stroke	55 mm	52 mm	36 mm
Capacity	211 CC	192 cc	35 cc
Power – Rated	3.0 hp (2.24 kw) @ 3000 rpm	3.1 hp (2.28 kw) @ 3600 rpm	0.82 kw @ 5600 rpm
Cooling system	Air Cooled	Air Cooled	Air Cooled
Starting system	Rope & Pulley	Recoil Starter	Pulley and Rope
Fuel Tank capacity	2.5 Lts	3.4 Lts.	2 Lts.
Fuel	Diesel run	Petrol Start, Kerosene Run (HSPP)	Petrol mixed 2 T Oil in ratio of 25:1
Oil Capacity	0.75 Lts	0.5 Lts.	-
Lubricant	SAE 20W 40	SAE 20W40	-
Lubricating system	Forced Lubrication via Trochoidal pump,	Splash Type	Mist Lubrication – Petrol/2T (Oil Mixture of ratio 25:1)
Direction of Rotation	Anticlockwise viewed from PTO side	Counter Clockwise (facing P.T.O Shaft)	-
Spark Plug	-	W 10 BC MICO	Mico W 175 Z1
Governor	Centrifugal, fly weight	Centrifugal, Fly Weight	-
Compression Ratio	19.9:1	5.5:1	-
Air Cleaner	Oil Wetted type / Oil bath type	Oil Bath Type	-
Engine dry weight	26 Kgs	17 kgs	3.6 kg

#### TECHNICAL SPECIFICATIONS OF SPRAYERS

Type	MS22 HTP	MS22 HTP	Power Sprayer
No. Of Piston	3	3	-
RPM	800-1000 rpm	800-1000 rpm	5600 rpm
Operating Pressure	15-32 kg/cm <sup>2</sup>	15-35 kg/cm <sup>2</sup>	-
Discharge	14 - 22 LPM	16-21 LPM	0.5-20 LPM
Tank Capacity	-	-	10 lit
Including Engine	45 kg	28 kg	10.5 kg

DISTRIBUTOR / DEALER

Manufactured & Marketed By:

**Southern Agro Engine (P) Ltd.**

#24A, III Phase, Industrial Estate, Guindy,  
Chennai - 600 032, India.

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22500133 / 22501134 Fax: 044-22500039

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Our Branches @ Bangalore, Kolkata & New Delhi