

Materials List for:

# Modification and Application of a Leaf Blower-vac for Field Sampling of Arthropods

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## Materials

Name	Company	Catalog Number	Comments
<b>Machine</b>			
Leaf blower-vac	We used Oleo-Mac BV300, Made in Italy	Power: 1.0 kW, Displacement: 30.5 cc, Max air volume: 720 m <sup>3</sup> /hr, Max air speed: 70 m/sec, Weight: 4.5 kg, Diameter of suction mouth: 113 mm	There are many different brands and models available. For comparable performance, the specifications concerning power and air speed should be similar to those presented here.
<b>Additional parts for modification</b>			
PVC pipe 1		Outer ø of end connected to the machine: 112 mm, Inner ø of end connected to PVC pipe 2: 110 mm	This is the cover of a ø 110 mm PVC pipe
PVC pipe 2		Outer ø: 110 mm, Length: 10 cm	Normal outer ø 110 mm PVC pipe; to connect PVC pipe 1 and 3
PVC pipe 3		Inner ø of big end: 110 mm, Inner ø of small end: 50 mm	PVC ø 110 mm to ø 50 mm downpipe reducer
PVC pipe 4		Outer ø: 50 mm, Length: 5 cm	Normal ø 50 mm PVC pipe; to connect PVC pipe 3 and 5
PVC pipe 5		Inner ø: 50 mm and 32 mm, Outer ø of small part: 38 mm	PVC ø 50 mm to ø 32 mm downpipe reducer
Hose		Outer ø: 40 mm	Wire-fortified, flexible plastic hose
Metal gauze		Mesh ø: 1 mm, ø: 60 mm	Prevent the sampling net from being sucked into the machine
PVC pipe 6		Outer ø of small end: 38 mm, Inner ø of big end: 63 mm	PVC ø 32 mm to ø 63 mm reducer
PVC pipe 7		Outer ø: 63 mm, Length: 25 cm	Normal outer ø 63 mm PVC pipe
U-PVC glue			U-PVC glue; to connect PVC parts
Metal clamp hoops (2)	Flexible between ø 35 mm - 51 mm	To connect the hose with the PVC pipes	
Thread seal tape	Width: 18mm	Seal the hose-PVC connections	
Screws (3)		Length: 25 mm	To connect PVC pipe 1 with the suction mouth of the machine
<b>Sampling net and enclosure</b>			
Sampling net	Mesh size ø: 0.3 mm, Width of the mouth: 10 cm, Height: 30 cm	The sampling net has a conical shape.	
Bucket		Bottom ø: 40 cm, Volume: 50 L	Cut the bottom
Nylon sleeve		Mesh size ø: 0.3 mm, Length: 1 m	To cover the bucket as enclosure