

Martin Lishman

Soil Testing



Soil Quality Testing and Sampling

Soil Test Kits

Palintest Soil Testing Kits

Palintest have a world-wide reputation for water and environmental analysis equipment. Palintest Soil Test Kits are rapid and reliable tools for optimising crop yields and protecting the environment from over-fertilisation. They allow field testing of soil samples comparable to standard laboratory methods. The kits cover pH, lime and NPK testing plus sophisticated soil management to measure a wide range of trace elements.



SK100 Soil pH and Lime Requirement Kit

Reagents for 50 soil pH tests plus simple follow-on test to calculate lime dosing needs.

Key Features

- **Simple to use** - specially developed soil reagent tablets means reliable results can be obtained by all users - with or without soil analysis training.
- **Palintest Soiltester** - a simple colour comparison block used in the SK100, SK200 and SK300 kits, giving clear visual results.
- **Soiltest 10 Bluetooth Photometer** - in the SKW400 and SKW500 kits, allows high accuracy testing, data download and integration with the Palintest Portal using the Aqua Pal app.
- **Developed specifically** for portable use by agronomists, farmers and fertiliser professionals.



SK200 Soil Fertility Kit

Measures soil pH, lime requirement, nitrogen, phosphorus and potassium (N/P/K) macronutrients.



SK300 Soil Management Kit

Reagents for 50 tests of each of soil pH, lime requirement, nitrogen, phosphorus, potassium, magnesium and calcium plus pocket sensor for soil conductivity testing.



SKW400 Professional Soil Management Kit

Reagents for 50 tests of each of soil pH, lime requirement, nitrogen, phosphorus, potassium, magnesium and calcium. Includes both the Bluetooth SMART-enabled Soiltest 10 photometer and the multiparameter pocket sensor for pH, EC, TDS and salinity testing.



SKW500 Complete Soil Kit

Provides agronomists, soil scientists and farming professionals with a portable soil laboratory for macronutrients and micronutrients. Includes reagents for 50 tests of each of soil pH, lime requirement, nitrogen, phosphorus, potassium, magnesium and calcium plus trace minerals aluminium, ammonia nitrogen, chloride, copper, iron, sulphur and manganese. Also the Bluetooth SMART-enabled Soiltest 10 photometer and the multiparameter pocket sensor for pH, EC, TDS and salinity testing.

Choose Your Soil Kit

Soil Kit Test	pH	Lime (CaCO ₃)	N	P	K	Mg	Ca	EC	Salinity	Al	NH ₃	Cl	Cu	Fe	Mn	S
SK100	✓	✓														
SK200	✓	✓	✓	✓	✓											
SK300	✓	✓	✓	✓	✓	✓	✓	✓								
SKW400	✓	✓	✓	✓	✓	✓	✓	✓	✓							
SKW500	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Soil Compaction



SOIL COMPACTION TESTER

The Martin Lishman soil compaction tester is a robust, stainless steel penetrometer with pressure gauge. It helps identify compaction layers, measure soil firmness and contributes to essential soil management decisions.

Key Features

- **Built-in pressure gauge** - colour coded to give compaction pressure readings at different depths. Re-fillable oil chamber.
- **Stainless steel probe** - 75cm long with 10cm graduation marks. Supplied with two tips for firm and soft soil and integral tip storage device.
- **Strong**, anodised aluminium housing and ergonomic handle.

Soil Sampling



SOIL SAMPLING AUGERS

A wide range of sampling solutions for all soil types and depths, from simple pot plant samplers to heavy duty augers with reinforced hammering heads. The most widely used in agriculture is the footrest soil sampler.

Key Features

- **Stainless steel** - with titanium components
- **20cm pot plant sampler** - for container plants, with 10ml scale for defined soil samples
- **30cm footrest sampler** - with foot rest for crops with dense root zones
- **60cm hammer head sampler** - detachable rubber sheathed grip with notch for removing soil samples. With 10cm scale. Use for outdoor vegetables.

Soil & Compost Temperature



32.5mm long, 12mm diameter soil temperature probe, supplied with protective sleeve.

2m stainless steel push-in sensors for compost production monitoring can be connected to either a Minitemp Monitor or as part of our Barn Owl Wireless System - please ask for further details.



Soil Test Meters

We supply a wide range of meters to carry out various soil tests including pH and temperature. Equipment with other testing functions such as conductivity, TDS, ORP and trace element analysis is also available - please ask for details.

Soil Quality Details and Specifications

Soil Test Kits

SK100 Soil pH and Lime (Product Code: SOIL/ST/SK100)

Soiltester, reagents for 50 of each test, sample preparation accessories, hard carry case

SK200 Soil pH, Lime, NPK (Product Code: SOIL/ST/SK200)

Soiltesters, reagents for 50 of each test, sample preparation accessories, shoulder bag

SK300 Soil pH, Lime, NPK, Mg, Ca, EC (Product Code: SOIL/ST/SK300)

Soiltesters, reagents for 50 of each test, pocket conductivity sensor, calibration standard, sample preparation accessories, shoulder bag and hard carry case

SKW400 Soil pH, Lime, NPK, Mg, Ca, EC, Salinity (Product Code: SOIL/ST/SKW400)

Bluetooth SMART-enabled Soiltest 10 photometer with check standards, free downloadable Aqua Pal app, reagents for 50 of each test, multi-parameter pocket sensor, calibration solutions and standard, sample preparation accessories, IP67 lockable carry case with integrated work surface

SKW500 Soil pH, Lime, NPK, Mg, Ca, EC, Salinity, Al, NH₃, Cl, Cu, Fe, Mn, S (Product Code: SOIL/ST/SKW500)

Bluetooth SMART-enabled Soiltest 10 photometer with check standards, free downloadable Aqua Pal app, reagents for 50 of each test, multi-parameter pocket sensor, calibration solutions and standard, sample preparation accessories, IP67 lockable carry case with integrated work surface

Replacement Reagent Tablets Available in 50 test packs as follows:

Product Code	Description	SK100	SK200	SK300	SKW400	SKW500
SOIL/ST/ST2200	pH	✓	✓	✓		
SOIL/ST/ST2210	Lime	✓	✓	✓	✓	✓
SOIL/ST/SKR001	Nitrate		✓	✓	✓	✓
SOIL/ST/SKR002	Phosphate		✓	✓		
SOIL/ST/SKR003	Phosphate 2				✓	✓
SOIL/ST/SKR004	Potassium		✓	✓	✓	✓
SOIL/ST/SKR005	Magnesium/Calcium			✓	✓	✓
SOIL/ST/SKR006	Aluminium					✓
SOIL/ST/SKR007	Ammonia					✓
SOIL/ST/SKR008	Copper					✓
SOIL/ST/SKR009	Iron					✓
SOIL/ST/SKR010	Manganese					✓



Specifications:

Soil Test Reagents:

Tablet format, stable for up to 10 years, in packs sufficient for at least 50 tests. Spare packs available individually for each test.

Test Ranges:

Soil pH	0 - 14
Lime Requirement (CaCO ₃)	0 - 34 tonne/ha
Conductivity	0 - 19.9 mS/cm
Salinity	0 - 1%
Nitrate Nitrogen (N)	0 - 25 mg/L N
Phosphate Phosphorus (P)	0 - 150 mg/L P
Potassium (K)	0 - 450 mg/L K
Magnesium (Mg)	0 - 500 mg/L Mg
Calcium (Ca)	0 - 2500 mg/L Ca
Aluminium (Al)	0 - 50 mg/L Al
Ammonia (NH ₃)	0 - 75 mg/L N
Chloride (Cl)	0 - 1000 mg/L Cl
Copper (Cu)	0 - 25 mg/L Cu
Iron (Fe)	0 - 25 mg/L Fe
Manganese (Mn)	0 - 25 mg/L Mn
Sulphur (S)	0 - 300 mg/L S

Soiltest 10 Photometer:

Dual light source, 450-650nm wavelengths, backlight LCD screen, Bluetooth and USB download to iOS or Android devices, 500 data point memory, multi-language screen prompts (En, Fr, Sp, De, It, Tu, Cn), battery (3 x AA) or mains power, IP67, 15 x 25 x 7cm, 0.975 kg, accuracy +/-1% T

Weights: SK100 0.6kg; SK200 2.6kg; SK300 5kg; SKW400 9.5kg; SKW500 10.5kg

Dimensions: SK100 23 x 28 x 7cm; SK200 34 x 23 x 16cm; SK300 34 x 23 x 16cm (bag), 34 x 46 x 14cm (case); SKW400 & SKW500 56 x 43 x 21cm

Replacement components: All hardware accessories and reagents from each kit are available as replacements. The reagents required are shown in the table on the left.

Soil Compaction Tester (Product Code: SOILCOMPACT)

Stainless steel probe, anodized aluminium handle, analogue manometer



Specifications:

Range: 0 - 400 psi; **Weight:** 2.15kg

Dimensions: 920 x 290 x 60mm (970 x 330 x 70mm packed)

Probe: 12mm diameter; Usable length 750mm

Soil Sampling Spears

20cm pot plant sampler (Product Code: SOILSMPLR5001)

30cm footrest sampler (Product Code: SOILSMPLR5006)

60cm hammer head sampler (Product Code: SOILSMPLR5012)

Many other sizes and designs of soil sampler, including compost and profile samplers, are available - please ask for further details.

Specifications:	20cm Pot Plant	30cm Footrest	60cm Hammer head
Length (cm)	35	81	81
Sample depth (cm)	20	30	60
Outer diameter (mm)	16	20	20
Inner diameter (mm)	14	14	13
Weight (Kg)	0.15	1.5	2.4

Soil Thermometer (Product Code: SOTT) - 32.5mm long, 12mm diameter, supplied with protective sleeve

Compost Temperature

Minitemp Temperature Monitor (Product Code: CQ/MTM10); 2m stainless steel compost sensor (Product Code: FC060)

Specifications:

Soil Thermometer

Range: 0-80°C

Compost Temperature

Monitor operating range with sensor: -40°C - 125°C

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