

PRODUCT KNOWLEDGE · SOIL & ORGANIC

V-Compost

Organic matter 25% min · N 5% min · pelleted, 20 kg

Pelleted organic matter for soils running below 1% — the input that rebuilds what a nutrition programme is standing on.

Registration SFRI-2025-07

20 kg

Land preparation

Broadcast



THE PROBLEM

Most Pakistani cropping soils are running below 1% organic matter.

What a soil needs to hold nutrients, and what it has.

A healthy soil



3–5% organic matter

Typical Pakistani cropping soil



under 1%

< 1%

organic matter in most cropping soils

and organic matter is what holds nutrients, holds water and holds structure

Decades of cereal cropping with residue removed and no organic return will do this to any soil. It is not a fertility problem you can fertilize your way out of.

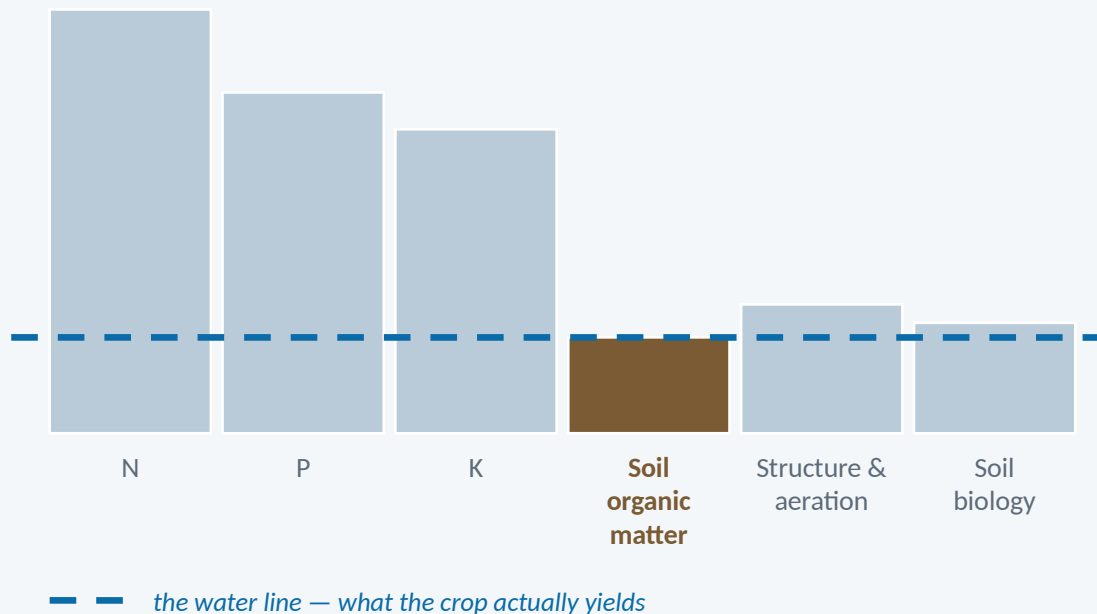
Indicative proportions. The point is the gap, and the gap is not controversial.



Every nutrient recommendation in the programme assumes a soil that can hold what it is given. Below 1% organic matter, that assumption stops being safe.

The shortest stave here is not a nutrient.

Carl Sprengel set the law out in 1840; Justus von Liebig made it famous. It is usually read as being about nutrients. It is really about whatever is limiting.



Organic matter

A soil at under 1% organic matter has little cation exchange capacity, little water holding, weak aggregate structure and almost no biology. Every nutrient stave above it is capped by that. V-Compost lengthens the stave the others are standing on.

The staves show the shape of the problem, not measured soil values. A soil test reports organic matter as well as nutrients — VAN Lab publishes its prices.

THE PACK

What is actually in the bag.

Pelleted, so it spreads and stores like a fertilizer rather than like a manure heap.



V-Compost — 20 kg

ORGANIC MATTER

25% minimum

NITROGEN

N 5% minimum

FORM

Pellet — broadcasts with normal equipment, no smell, no cartage of wet bulk

PACK

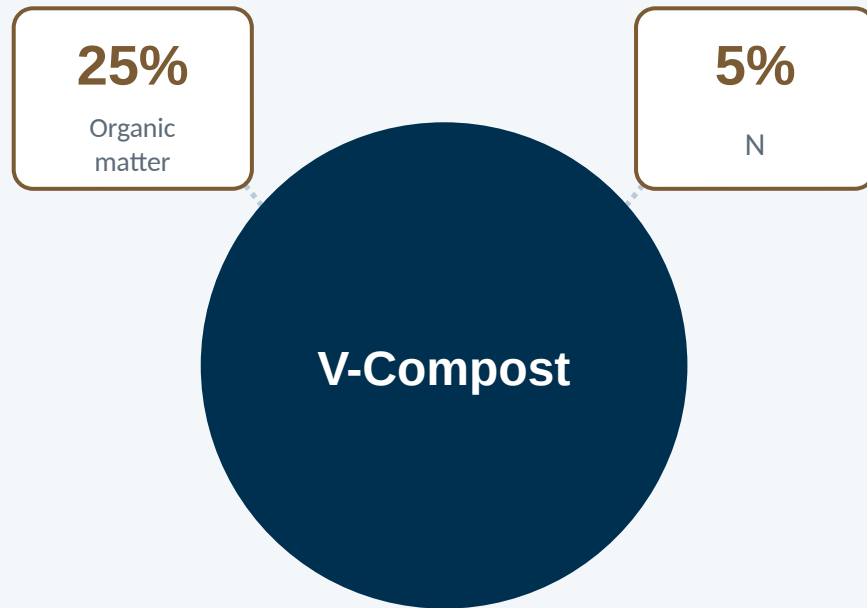
20 kg — one bag per acre in the published programmes

REGISTRATION

SFRI-2025-07

What the label declares.

As published on van.com.pk and registered under SFRI-2025-07.



FORM

Pellet

handles like a granular fertilizer

PACK

20 kg

one bag per acre at land preparation

ROUTE

**Broadcast at
land preparation**

incorporated before sowing

Pelleting is what makes organic matter practical.

The agronomy of compost is old. What is engineered here is the handling.

1 Consistent, tested analysis

Farmyard manure varies from load to load — nobody knows what is in it. V-Compost is made to a specification and batch-tested before it ships, so the 25% and the 5% are numbers you can plan a programme around.

2 Pelleted, not bulk

A pellet broadcasts with the same equipment as a granular fertilizer, stores in a shed, and does not carry the water weight that makes bulk organic matter expensive to move.

3 One grade, so the programme is repeatable

There is one V-Compost — a single 20 kg grade. A grower who saw a result last season gets the same material this season, and an agronomist writing a plan never has to ask which version is in the shed.

4 Nitrogen that arrives slowly

The nitrogen in an organic material is released as the material breaks down, which is a different release curve from urea. It is a background supply, not a top dressing.

The organic matter is the product. The 5% nitrogen is a useful bonus, not the reason to buy it.

Organic matter is the floor every interaction sits on.

Established interactions between soil nutrients — after Mulder. These describe how nutrients behave with one another, not how V-Compost performs.

Works with

Organic matter raises cation exchange capacity, so the soil holds potassium, calcium and magnesium instead of losing them

Decomposing organic matter releases organic acids that keep phosphate from being fixed by calcium as quickly

The same organic fraction chelates zinc, iron, manganese and copper into plant-available forms

Better structure and water holding improve uptake of everything, because uptake happens in the soil solution

Competes with

Excess calcium suppresses phosphorus, magnesium, zinc, iron, manganese, boron and potassium together — the standing condition of calcareous soil

Excess phosphorus suppresses zinc, iron and copper

A soil with no exchange capacity cannot buffer any of these — the antagonisms hit the root undiluted

Leaching and run-off are not antagonisms but they are losses, and a soil with no organic matter loses more of everything

Raising organic matter does not correct one antagonism. It softens all of them at once, which is why it is the first thing to fix and the last thing people budget for.

What organic matter actually does.

Six functions, none of which a bag of NPK can perform.

1 Cation exchange

Gives the soil somewhere to hold potassium, calcium and magnesium

2 Water holding

Raises the amount of irrigation water the soil retains for the crop

3 Aggregate structure

Binds particles into aggregates — which is what creates pore space

4 Aeration and workability

Softens compacted ground so roots and air can move through it

5 Biology

Feeds the microbial population that mineralises nutrients and cycles residue

6 Buffering

Resists pH and salinity swings rather than passing them to the root

Bulk material and a concentrate are different purchases.

Both have a place in VAN's range. They differ in what they cost to move.

V-Compost — bulk organic matter

20 kg bags of pelleted organic material.

- Adds actual organic matter to the soil mass
- Also supplies N 5% as a slow background release
- Broadcast and incorporated at land preparation
- The route when the soil itself needs rebuilding

Humi Grow — humate concentrate

The active humic fraction, without the bulk.

- 40% humic acid — chelation and structure, concentrated
- Very little nutrition; it is not a nutrient product
- Kilograms per acre rather than bags
- The route when the target is nutrient use efficiency

These are complements, not alternatives. V-Compost rebuilds the soil mass; a humate works on the chemistry inside it. A grower fixing a soil below 1% should be doing both.

WHERE IT IS USED

Land preparation, across pulses, cane and orchards.

V-Compost appears in VAN's locked 2025 crop nutrition plans as a land-preparation application, one bag per acre.

Sugarcane (Feb)

Soybean

Lentil

Mungbean & Mash

Chickpea

Banana (Y1)

Banana (Y2)

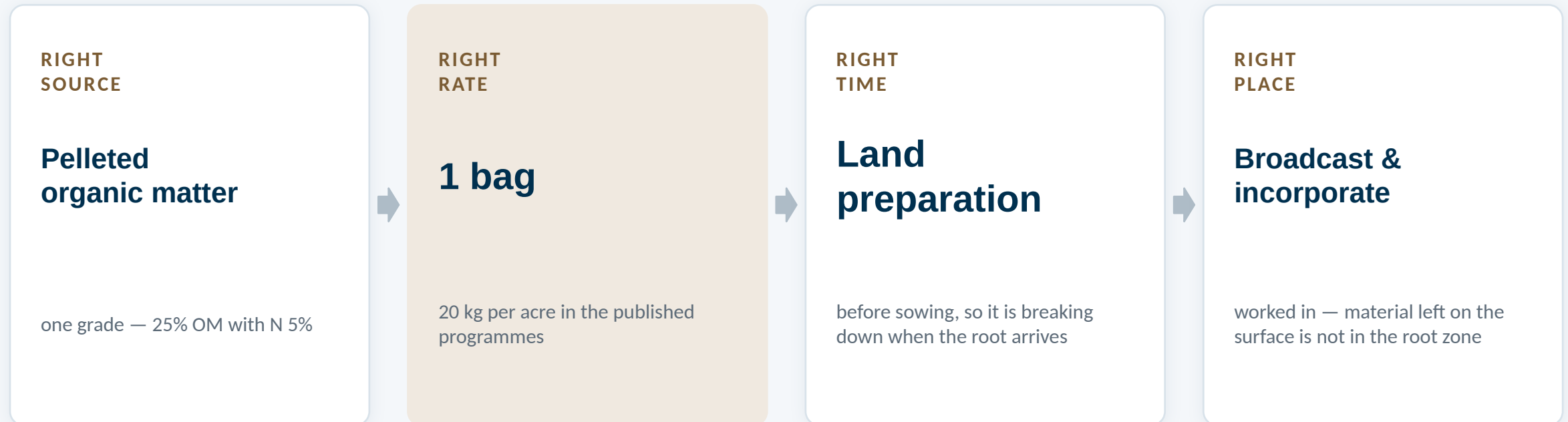
Published stage-by-stage at van.com.pk/crops/.

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The pulse crops are a deliberate pattern: a legume fixes its own nitrogen but still needs a soil with structure and biology for the rhizobia to work in.

Right source, right rate, right time, right place.

The published doses. VAN publishes a rate and a stage, not a yield promise.

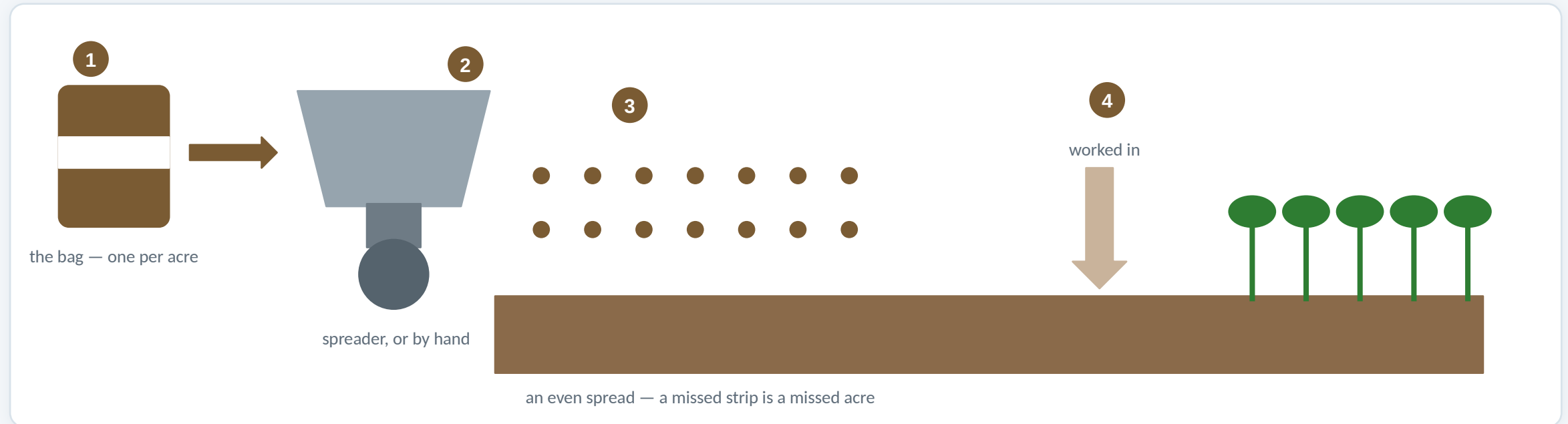


Banana year two takes it through fertigation rather than broadcast, because by then the crop is established and the ground is not going to be worked again.

HOW IT IS APPLIED

An even spread, then worked in.

Organic matter left on the surface oxidises. Incorporated, it builds structure.



1 Measure it

1 bag — 20 kg per acre.

2 Spread evenly

Spreader or by hand. A missed strip is a missed acre and it shows at harvest, not on the day.

3 Work it in

Incorporate into the root zone. Material left on the surface is not where the roots are.

4 At the right stage

At land preparation, before sowing.

Doses are per acre, from VAN agronomy. Incorporation is not optional — it is the difference between feeding the crop and feeding the surface.

Four things that decide whether it works.

1

Incorporate it

The effect is on the root zone. Material sitting on the surface oxidises and blows away instead of building structure where it is needed.

2

Give it seasons, not weeks

Organic matter builds slowly. One application is worth having; a programme across several seasons is what actually moves the soil test number.

3

Count the nitrogen, but do not rely on it

N 5% in 20 kg is one kilogram per acre, released slowly. It is a background supply — it does not replace a nitrogen programme.

4

Pair it with a humate

V-Compost rebuilds the soil mass; Humi Grow works on the chemistry inside it. On a soil under 1% organic matter the two together beat either alone.

What is behind the bag.

1

Registration SFRI-2025-07

Registered under the Soil Fertility Research Institute route for organic and soil-amendment products.

2

Made in VAN's own circular-economy stream

Produced from VAN's organic feedstocks rather than bought in and rebagged.

3

Tested before it ships

Every batch is tested in VAN's own PNAC-accredited laboratory, ISO/IEC 17025:2017, LAB-336.

4

Certificate on request

Send the batch number off the bag and VAN will send the certificate of analysis for that batch. Free, no sample, no form.

SOURCES

Where every figure in this deck came from.

Analysis, registration, pack

van.com.pk — organic matter 25% min, N 5% min, 20 kg, Registration SFRI-2025-07

One grade

VAN, 20 Aug 2026 — V-Compost is a single product; the plant/poultry variants row was withdrawn from the site the same day

Doses and stages

VAN locked crop nutrition plans, 2025 set — sugarcane (Feb), soybean, lentil, mungbean & mash, chickpea, banana Y1 and Y2

Organic matter functions

Established soil science — cation exchange, water holding, aggregation, biology, buffering

Nutrient interactions

After Mulder's chart — established relationships

Law of the minimum

Carl Sprengel (1840), popularised by Justus von Liebig

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For information only. VAN may change a product's composition at any stage for agronomic, efficiency or upgrade reasons.