Terradonis

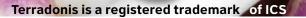
PRECISION ROLLER SEEDER

and

Jser

Manual



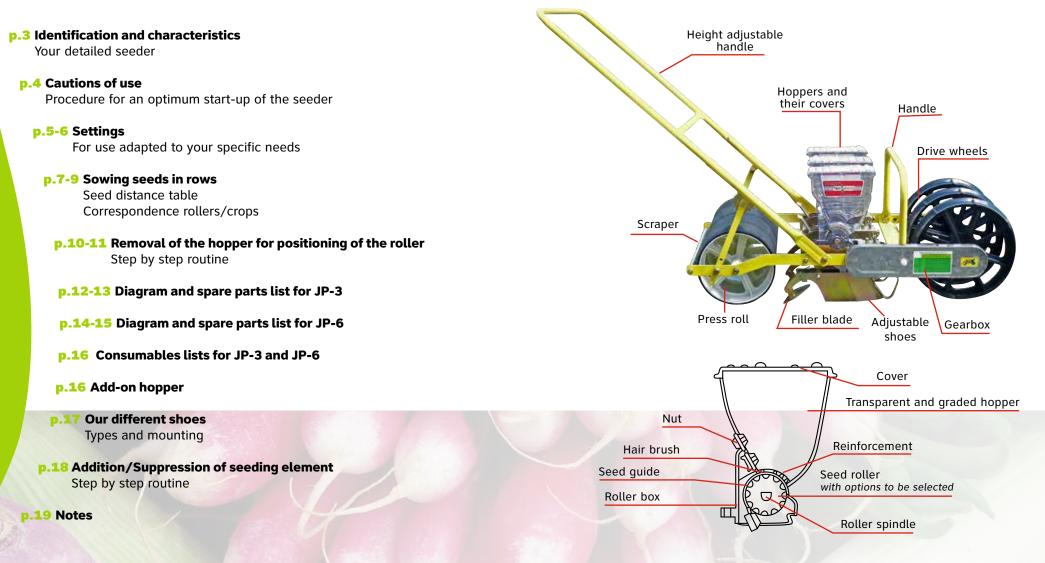




SUMMARY

Terradonis

IDENTIFICATION AND FEATURES



INSTRUCTIONS FOR USE

SETTINGS

Terrodonis

→ Lubricate all rotating parts except the seed roller.

→ The brush, the guide plate, the spongy rubber of the transmission wheel and the spongy rubber of the compaction wheel are consumables. Check them regularly and replace as necessary.

- → Make sure the seedbed is uniform.
- → Check whether the seed roller is caked in dirt, pesticides or seed casing residues. If it is, it should be cleaned.
- → Prepare a seedbed by carefully hoeing and levelling.
- → When you sow beans or grains, a bypass can occur in the seed hopper. In this case, gently tap the hopper and fill the hopper half full instead.

→ When you disassemble the sower, make sure the free roller is not caked in dirt, etc. ...

SETTINGS

→ ADJUSTMENT OF INTER-ROW DISTANCE:



Let it slide along the axles. Graduation bar can help to settle the distance according to your need.

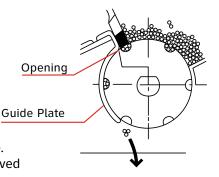


→ BRUSH: In its default position, the brush lightly touches the seed roller. To increase the volume of seeds, put the brush in a high position (loosen the wing nut and lift the brush).

If you use coated seed: The brush should touch the seeds, and exercise slight pressure on them. It is necessary to find the right adjustment for your seeds, because if the brush is too low, it will wear very (too) quickly. If it is too high, the seeds will break.

→ GUIDE PLATE: The guide plate forms

 a cavity between the roller, the brush
 and the guide plate.
 Without this space, the seeds might break.
 The end of the guide plate
 must be in close contact with the roller.
 If the guide plate becomes misaligned,
 you can realign it using the diagram opposite.
 In a general way, guide plate should be removed
 as soon as the brush is raised.



→ SEEDING DISTANCES: The distances between the seeding can be adjusted by adjusting the pinions and the number of holes in the roller, see the seed distance table.

Note: the actual planting distances may vary depending on soil quality and speed of work. Test intervals based on the ground before you start planting.

....SETTINGS

SOWING SEEDS IN ROWS

Terrodonis

→ **PLANTING DEPTH:** Planting depth may be adjusted by lowering or raising the shoe.

→ **SOIL COVER:** Adjust the angle of the filler blade for optimal soil cover.

→ HEIGHT OF THE HANDLE: The handle height can be adjusted by loosening the screws at the base of the fork of the handle and the buttons on each of its removable parts and by adjusting them according to your needs.

- → CLEANING: If soil sticks to the compaction wheel, the contact surface must be cleaned before it sticks (it might deposit oil or dirt).
- → HOPPER COVER: The hopper cover is made of different molded holes representing the holes of the different rollers offered. They will enable you to verify that seeds and

rollers are well-chosen and suitable. Under each mold, the size of the hole. The table below shows the sizes of the roller holes enabling you to find the roller that you need.

TABLE OF ROLLER HOLE SIZES (in mm)

Ref.	Hole size	Hole depth	Length if hole in X	Ref.	Hole size	Hole depth	Length if hole in X		
The l	The letter indicates the type of hole. Refer to the table of distances to decide on the right number of holes for your needs.								
А	13,50	6,00	-	R	9,00	3,50	-		
AA	12,00	6,00	-	S-4	S	PECIAL FORM (19mm x 8mm)			
С	11,00	5,50	-	U-4	SF	SPECIAL FORM (19mm x 10mm)			
F	5,00	2,50	-	Х	4,00	2,00	-		
FJ	5,00	3,00	-	XY	2,50	1,20	5,00		
G	9,00	4,50	-	XYY	2,00	1,20	4,00		
J	SPEC	CIAL FORM (½ h	ole of 1.5mm))	Y	3,50	1,50	-		
L	7,00	2,50	-	۲J	3,00	2,00	-		
LJ	7,00	3,70	-	YK	3,50	2,30	-		
М	5,00	2,00	-	YX	2,50	1,50	-		
MJ	6,00	3,50	-	YXX	2,50	1,80	-		
MM	6,00	2,50	-	YYJ	3,00	1,70	-		
N	SPECIAL FORM (16mm x 6mm)		YYX	2,00	1,8	-			
Q	8,00	3,00	-	Z without hole		External diame	ter 59.85mm		

Feel free to contact us for any special request of seed rollers (for other dimensions than the one quoted in the table). Quoted dimensions may vary, our website www.terradonis.com is updated accordingly.

→ The quantity of seed is adjusted by the combination of 3 elements:

-Number of holes on the seed roller -Size of the holes in the seed roller -Number of sprocket teeth used

For the number of holes you need: refer to the table of distances below:

						NUME	BER OF	TEETH	PER S	PROCI	(ET			
			Front	14	14	13	13	11	11	10	11	10	10	9
			Back	9	10	10	11	10	11	11	13	13	14	14
I		2		320	360	380	420	460	500	540	580	640	700	760
		3		210	230	250	280	300	330	360	390	430	460	510
		4		160	180	190	210	230	250	270	290	320	350	380
		6		105	115	125	140	150	165	180	195	215	230	255
	Number	8		80	90	95	105	115	125	135	145	160	175	190
	of holes	10	Small	64	72	76	84	92	100	108	116	128	140	152
	per seed	12	grain seeders	53	58	63	70	75	83	90	98	108	115	128
	roller	10	Securis	40	45	48	53	58	63	68	73	80	88	95
	. oner	20		32	36	38	42	46	50	54	58	64	70	76
		24		27	29	32	35	38	42	45	49	54	58	64
		30		21	24	25	28	31	33	36	39	43	47	51
l		36		18	20	21	23	26	28	30	32	36	39	42

TABLE OF DISTANCES (in mm)

PLANTING DISTANCE: see table above.

SOWING SEEDS IN ROWS...

Terradonis

...SOWING SEEDS IN ROWS

→ NUMBER OF SEEDS/HOLE:

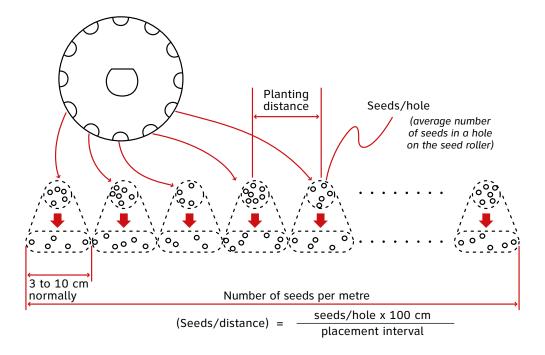
The number of seeds differs depending on seed size, which in turn depends on the species and the year and the adjustment of the brush.

Therefore numbers shown in the table of distances are given as a guideline only. Below are some examples of correspondence between rollers and crops, on the basis of one seed per hole:

EXAMPLES OF CORRESPONDENCE BETWEEN ROLLERS AND CROPS

CROP	ROLLER	CROP	ROLLER		
Basil	YX24	Endive	XYY12		
Beetroot	MJ12	Radish	X24		
Broccoli	YYJ6	Rocket	X12		
Carrot	X24, XYY24, XY24	Wheel with no hole	Z		
Camomile	YYX24	Tomato	X2		
Celery	YYX12	Thyme	YYX12		
Chicory	XYY12	Spinach	FJ24		
Cabbage	YYJ6	Fennel	X12		
Pak Choi	YYJ6	Green beans	N6		
Frisée	YYJ6	Lettuce (coated)	MJ12		
Spring onion	Y24	Lettuce (raw) XYY12 or 24			

CROP	ROLLER
Flax	Y24
Lamb's lettuce	F24, FJ12
Mint	YYX 12 or 24
Onion (raw)	X24
Sorrel	YYX12 or 24
Parsnip	L12, L24
Parsley	YYJ24
Leek	Y24
Peas	AA12



Caution: the planting distance depends on the combination of sprocket teeth (11 adjustment positions) and the number of holes on the metering roll. The drive wheel may slip depending on soil quality and placement speed. Therefore, the number of seeds is a guideline only.

If the transmission wheel skids, planting distances will be larger, reducing the number of seedings. So make sure that the wheel does not slip.

Seed dispersal: Seeds are dispersed in a hole according to the direction of the motion until they are sown, and roll on the ground. The dispersal length varies depending on the size of the hole, the soil quality, the seed size and can vary between 3 and 10cm.

Terradonis

REMOVAL OF THE HOPPER FOR

POSITIONING OF THE ROLLER

Press the metal element to unclip the hopper, then lift.





2 Unclipped element.









4 To remove the pin, turn it as shown in photo below and pull, to release the pin and the roller.

5 The roller can now be changed.

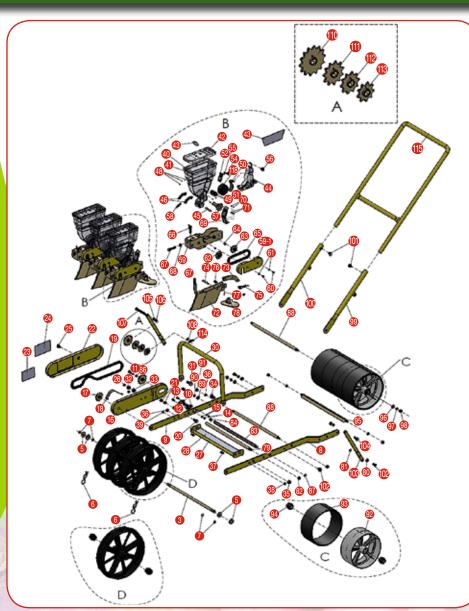




Terradonis is a registered trademark of ICS

Terradonis

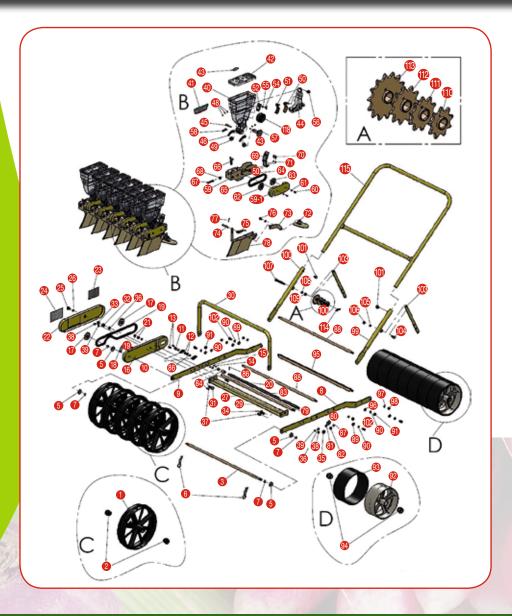
JP3: SPARE PARTS



N°	NAME	QTY	N °	NAME	QTY
1	Drive wheel	3	60	M5x10L nut	6
2	Drive wheel guard	4	61	M5 sealing washer	6
3	Drive wheel shaft	1	62	10 teeth sprocket	3
5	M12 washer	4	63	10 teeth free sprocket	3
6	Pin	2	64	8x10 Ring	3
7	Ring	4	65	Chain 410x26 links	3
8	Left side frame bar	1	66	M8x30L wing bolt	3
9	Right side frame bar	1	67	M8x40L nut	3
10	Bearing protection	2	68	M8 nut	3
11	Gear shaft Ø12x36.4L	1	69	Hopper release element	3
12	Bearing	2	70	M4x10L nut	6
13	M5x16L bolt	2	71	M4 sealing washer	6
14	M5 Nut	2	72	Shoe	3
15	Sealing washer M5	2	73	Shoe arm	3
16	Left chain box	1	74	Pin	3
17	11 Teeth sprocket	2	75	Tightener	3
18	Chain Guide	1	76	M6x10L nut	3
19	Chain 410x58 links	1	77	Pin	3
20	M8x20L screw	1	78	Filler blade	3
21	M8 nut	2	79	Front drive shaft	1
22	Right chain box	1	80	M8 washer	1
23	Sticker	1	81	M8 sealing flange	1
24	Seeding distance table	1	82	M8 nut	1
25	M6x11L Screw	1	83	12x376 hexagonal shaft	1
26	M6 Plate flange	1	84	Gear hub collar	1
27	Graduated bar for row spacing	1	85	One-way gear hub	1
28	Graduation	1	86	Pin	1
30	Handle	1	87	Ring	1
31	M10x27L nut	1	88	Rear drive shaft	1
32	M10 nut	1	89	M8 ring	4
33	M10 nut	1	90	M8 sealing flange	4
34	M10x20L nut	1	91	M8 nut	4
35	M10 nut	1	92	Compaction wheel	4
36	M10 sealing washer	1	93	Compaction wheel protection	4
37	M6x15L nut	2	94	Compaction wheel spacer	5
38	M6 nut	2	95	Compaction wheel scraper	1
39	M6 ring	2	96	M8 ring	2
40	Hopper	3	97	M8 Sealing flange	2
41	Sticker	6	98	M8 nut	2
42	Hopper cover	3	99	1 st part of the adjustable handle (L)	1
43	Sticker	3	100	1^{st} part of the adjustable handle (R)	1
44	Hopper – Collapsible part	3	101	M6x11 screw	2
45	Hopper drive shaft	3	102	M8x16L nut	4
46	Watertight seal	6	103	Handle mounting	1
48	+ fixation	18	104	M8 flange	1
49	Ring	6	105	M8 sealing washer	1
50	Seed guide	3	106	M8 nut	1
51	Seed guide felt	3	107	M8x60L nut	1
52	Brush	3	108	M8 sealing flange	1
54	M5x8L wing bolt	3	109	M8 nut	1
55	M5 plate flange	3	110	9 teeth sprocket	1
56	M5x9L flange	3	111	10 teeth sprocket	1
57	Hopper sprocket	3	112	13 teeth sprocket	1
58	Pin	3	113	14 teeth sprocket	1
50	Hopper block	3	114	M8 wing bolt	1
50		5	1 1 1 4		1 ±
<u>59</u>			115	Seeder handlo	1
59 59-1	Chain box	3	115 118	Seeder handle Seeding roller	1

Terradonis

JP6: SPARE PARTS



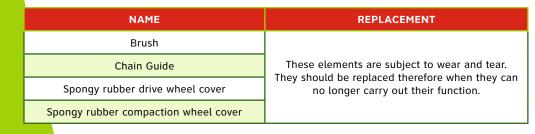
N°	NAME	QTY	N°	NAME	QT
1	Drive wheel	5	60	M5x10L nut	12
2	Drive wheel guard	6	61	M5 sealing washer	12
3	Drive wheel shaft	1	62	10 teeth sprocket	6
5	M12 washer	4	63	10 teeth free sprocket	6
6	Pin	2	64	8x10 Ring	6
7	Ring	2	65	Chain 410x26 links	6
8	Left side frame bar	1	66	M8x30L wing bolt	6
9	Right side frame bar	1	67	M8x40L nut	6
10	Bearing protection	2	68	M8 nut	6
11	Gear shaft Ø12x36.4L	1	69	Hopper release element	6
12	Bearing	2	70	M4x10L nut	12
13	M5x16L bolt	2	71	M4 sealing washer	12
14	M5 Nut	2	72	Shoe	6
15	Sealing washer M5	2	73	Shoe arm	6
16	Left chain box	1	74	Pin	6
17	11 Teeth sprocket	2	75	Tightener	6
18	Chain Guide	1	76	M6x10L nut	6
19	Chain 410x58 links	1	77	Pin	6
20	M8x20L screw	1	78	Filler blade	6
21	M8 nut	2	79	Front drive shaft	1
22	Right chain box	1	80	M8 washer	1
23	Sticker	1	81	M8 sealing flange	1
24	Seeding distance table	1	82	M8 nut	1
25	M6x11L Screw	1	83	12x376 hexagonal shaft	1
26	M6 Plate flange	1	84	Gear hub collar	1
27	Graduated bar for row spacing	1	85	One-way gear hub	1
28	Graduation	1	86	Pin	1
30	Handle	1	87	Ring	1
31	M10x27L nut	1	88	Rear drive shaft	1
32	M10 nut	1	89	M8 ring	4
33	M10 nut	1	90	M8 sealing flange	4
34	M10x20L nut	1	91	M8 nut	4
35	M10 nut	1	92	Compaction wheel	7
36	M10 sealing washer	1	93	Compaction wheel protection	7
37	M6x15L nut	2	94	Compaction wheel spacer	8
38	M6 nut	2	95	Compaction wheel scraper	1
39	M6 ring	2	96	M8 ring	2
40	Hopper	6	97	M8 Sealing flange	2
41	Sticker	12	98	M8 nut	2
42	Hopper cover	6	99	1 st part of the adjustable handle (L)	
43 44	Sticker	6	100	1 st part of the adjustable handle (R) M6x11 screw	1
	Hopper – Collapsible part	6	101		
45	Hopper drive shaft	6	102	M8x16L nut	4
46 48	Watertight seal + fixation	12	103	Handle mounting	2
48		12	104	M8 flange M8 sealing washer	1
50	Ring		105	M8 nut	1
50	Seed guide	6	105		1
51	Seed guide felt Brush	6	107	M8x60L nut M8 sealing flange	1
52 54	M5x8L wing bolt	6	108	M8 sealing hange M8 nut	1
55	M5 plate flange	6	1109	9 teeth sprocket	1
<u>55</u>	M5 plate flange M5x9L flange	6	111	10 teeth sprocket	
56		6	111	13 teeth sprocket	1
	Hopper sprocket Pin		112	13 teeth sprocket	
58		6			1
					1
08-T		ь			1
59 59-1	Hopper block Chain box	6	114 115 118	M8 wing bolt Seeder handle Seeding roller	

Terrodonis

Terrodonis

CONSUMABLES

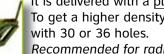
THE ROW-MARKER



→ DOUBLE ROW SHOE:

It allows to sow two rows, distant of 45mm, by seeding unit.



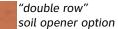


It is delivered with a plastic seed divider. To get a higher density, we recommend to use a roller Recommended for radish, carott, small vegetable...



standard soil opener







→ SOIL OPENERS: (exist in 60mm, 75mm and 120mm wide) Allows sowing in bed, rather than in line. In the case of sowing in seed nursery, it allows a better cover of soil surface, and then a better density is obtained.



DISC SOIL OPENER : It is recommended for stony and tough soil.

SETTING OF THE SHOES

Remove the standard shoe unscrewing the bolt, as shown on the picture.

2 Mount the shoe to be used and screw the bolt.

Caution: do not force to screw. As soon as the shoe is maintained, stop screwing.



Terradonis is a registered trademark of ICS

ADD-ON HOPPER

- THIS OPTION ALLOWS TO INCREASE THE STANDARD HOPPER CAPACITY FROM 1.2L TO 3L.
- Place the add-on on the top of the hopper, to superimpose the holes of the hopper to the holes of the add-on.
- Screw the white knobs. The cover of the hopper can be placed at the top of the add-on.

Take the hopper cover off.



(3)

Terradonis

ADDITION/SUPPRESSION OF SEEDING ELEMENT

→ IT IS POSSIBLE TO ADD OR TO SUPPRESS SEEDING ELEMENT(S).

The **JP3** (with a frame of 30 cm wide) can be used in maximum 4 rows Maximal spacing between 2 rows is 30 cm when used in a 2 row version. Maximal inter-row spacing is 10 cm if used in 4 row version The **JP6** (with a frame of 60 cm) can provide 7 rows maximum. The maximal inter-row spacing would then be 10 cm too.

→ HOW TO ADD/SUPPRESS 1 ROW :

Place the seeder on its side. The side without gearbox up.





2 Unscrew and take off each bolt, nut, washer, so that you can release the frame side bar.

3 Take off or add the seeding element.

In the case you add a row, make sure that the driving sprocket of the hopper fits the driving axle (hexagonal male and hexagonal female).

4 Replace the frame side bar, replace bolts, nuts, washers.

THE SEEDER IS READY TO WORK AGAIN.

NOTES

