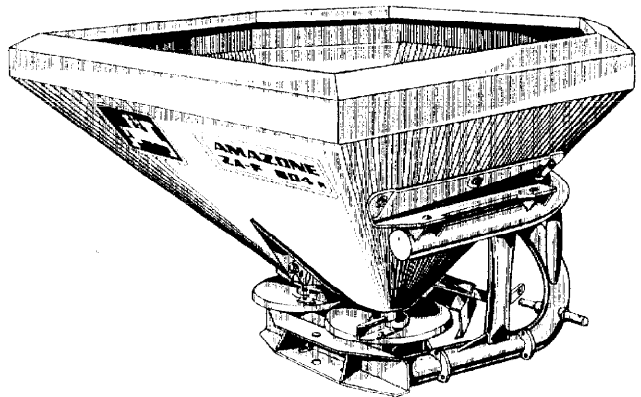


Setting Chart
for
Fertilisers, Seeds and Slug Pellets

Centrifugal Broadcasters
AMAZONE ZA-F



AMAZONEN-WERKE

MI1217
DS 500 (GB) 01.97
Printed in Germany



Dear AMAZONE customer,

With your decision to purchase an AMAZONE fertiliser spreader you have gained access to a new facility **exclusive to AMAZONE users** - our Fertiliser Testing Service, which we have created to assist with those difficult questions related to spreading fertiliser.

Every year new kinds of fertiliser appear on the market with the result that they cannot be found in your setting chart. In such a case you may ring your AMAZONE dealer or distributor for a guide for your product.

However, there are times when this will not be sufficient because the particular fertiliser description or type does not match with that in our files. This frequently happens with urea. In this situation we are able to help if a 3 kg sample of the material is sent to us in order that its spreading properties can be tested in our laboratory. The result of this test can be cross matched with information in our data bank to produce a guide setting.

When spreading **blended fertilisers** please note that

- the individual kinds may have differing flying properties.
- a de-mixing of individual kinds may occur.

The mentioned **setting-recommendations** for the **lateral distribution** only refer to the **weight distribution** and **not** to the **nutrient distribution**.

We would like to assist you to operate in a cost effective and an environmentally friendly manner. Thus in cases of doubt please ring.

Yours,
AMAZONE Fertiliser Testing Service

Please ask your AMAZONE dealer/distributor for your country's AMAZONE Fertiliser Testing Service telephone number and enter it below so that it is readily available.

Amazone Fertiliser Testing Service-

Telephone No.:

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Conversion to Imperial rates and measurements

If you are still more familiar with the imperial rates of lbs/acres and of m.p.h. the following simple conversion system will be of convenience to you: To find the rate of lbs/acre deduct 11 % of the given rates in kg/ha (kilogrammes per hectare). Example: CAN (Calcium Ammon. Nitr.) 27.5 % N

Spread width:	12 m
Tractor speed:	12 k.p.h. (km/h)
Setting:	25
Spread rate:	148 kg/ha
Calculation:	10 % of 148 = 14.8
	<u>1 % of 150 = 1.5</u>
	11 % of 150 = 16.3

148.0 $\therefore$ 16.3 = 131.7 lbs/acre at 12 k.p.h. = 7.5 m.p.h.

Conversion for metric figures of this chart to Imperial figures:

A. Spinner disc heights above ground/crop

1 cm	=	$\frac{3}{16}$ inch	78 cm	=	30 $\frac{9}{16}$ inches
2 cm	=	$\frac{8}{16}$ inch	80 cm	=	31 $\frac{1}{2}$ inches
3 cm	=	1 $\frac{3}{16}$ inches	82 cm	=	32 $\frac{1}{4}$ inches
5 cm	=	2 inches	83 cm	=	32 $\frac{7}{16}$ inches
45 cm	=	17 $\frac{3}{4}$ inches	84 cm	=	33 inches
50 cm	=	19 $\frac{2}{3}$ inches	86 cm	=	37 $\frac{2}{16}$ inches
55 cm	=	21 $\frac{2}{3}$ inches	89 cm	=	35 inches
60 cm	=	23 $\frac{2}{3}$ inches	90 cm	=	35 $\frac{1}{2}$ inches
63 cm	=	24 $\frac{8}{16}$ inches	93 cm	=	36 $\frac{1}{2}$ inches
65 cm	=	25 $\frac{9}{16}$ inches	94 cm	=	37 inches
68 cm	=	26 $\frac{3}{16}$ inches	95 cm	=	37 $\frac{4}{16}$ inches
70 cm	=	27 $\frac{1}{2}$ inches	96 cm	=	37 $\frac{8}{16}$ inches
75 cm	=	29 $\frac{1}{2}$ inches	97 cm	=	38 $\frac{2}{16}$ inches
76 cm	=	30 inches	100 cm	=	39 $\frac{3}{8}$ inches
77 cm	=	30 $\frac{1}{8}$ inches			

B. Effective spreading widths

10 m	=	32 $\frac{3}{4}$ feet	24 m	=	78 $\frac{3}{4}$ feet
12 m	=	40 feet	27 m	=	88 $\frac{1}{2}$ feet
15 m	=	50 feet	28 m	=	92 feet
16 m	=	52 $\frac{1}{2}$ feet	30 m	=	98 $\frac{1}{2}$ feet
18 m	=	59 feet	32 m	=	105 feet
20 m	=	65 $\frac{1}{2}$ feet	36 m	=	118 feet
21 m	=	69 feet			

C. Speeds

1 k.p.h.	=	0.6 m.p.h.	10 k.p.h.	=	6.2 m.p.h.
6 k.p.h.	=	3.7 m.p.h.	12 k.p.h.	=	7.5 m.p.h.
8 k.p.h.	=	5.0 m.p.h.	14 k.p.h.	=	8.7 m.p.h.

D. Weights

1 kg	=	2.200 lbs	1 lb	=	0.454 kgs
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1.0 In General

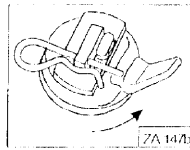
The types of fertiliser mentioned in this setting chart were tested in the AMAZONE test hall and the setting data determined there are included in the setting table. The types of fertiliser mentioned were in perfect condition at the time of determining the setting.

Due to varying ambient conditions by influences of the weather and/or unfavourable storing conditions, deviations in the physical properties (bulk density; size of granule; sliding ability; etc.) - even within the same kind and brand the spreading properties of the fertiliser kinds may change - and thus deviations from the table settings may occur. For this reason the **setting figures may only be considered as guide figures**. A guarantee that your fertiliser even when having the same name and is coming from the same manufacturer, continues to have the same spreading properties as the fertiliser tested by us cannot be assumed.

To avoid spreading errors the following points should be considered:

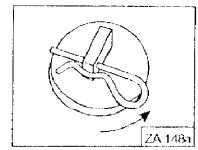
1. If possible chose a kind of fertiliser which is mentioned in the setting chart.
2. Store fertiliser under normal storing conditions (i. e. dry and separated by the kinds and manufacturers).
3. Set the machine accurately following the settings stated in the setting chart on the field to be spread with the hopper filled.
4. Before beginning to spread, - conduct a spread rate check with the calibration device (option).
5. When having unknown kinds of fertiliser or also for general check of the chosen vane position, conduct a working width check with the mobile test kit (option).
6. In every setting table we mention behind the name of each material also the weight per volume (bulk density) as kilogramme per litre (kg/l) the material had when it was calibrated in our test hall. Bulk densities can vary even within the same product.
7. The advice shown will enable optimum performance to be achieved. But the operator is responsible for correct operation. The company accepts no responsibility of liability consequential or otherwise for inaccurate spreading.
8.  540
The spread rates mentioned in this chart are based on the standard pto speed of 540 R.P.M. Wherever deviations from this rule are necessary it is mentioned in the tables.

Fig. 1



Stirrer-base
with -head
and "R" pin inserted

Fig. 2



Stirrer-base
without -head but
with "R" pin re-inserted

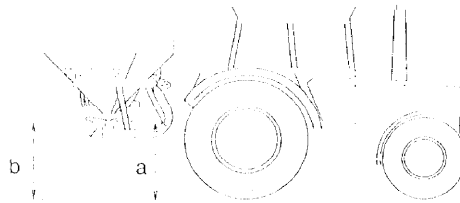


Fig. 3



Fig. 4

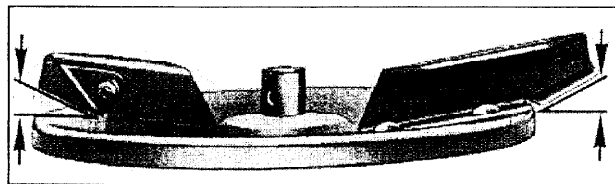


Fig. 5



Working width [m]

8. Two counter-rotating stirrer heads (**Fig.1**) are fitted in the bottom of the double hopper which provide an even flow of the fertiliser onto the spreading disks. For some spreading materials e.g. Urea or green manure seeds the stirrer heads should be removed but the „R-“ pins should be re-inserted with the bows facing the sense of spinning (**Fig.2**) [refer to hints in the setting chart !].



Do not install any agitators (offered as an option) when spreading any materials mentioned in this setting chart.

2.0 Setting the mounting height

Set the machine to the operating height on the field to be spread with a filled hopper exactly to the settings given in the setting chart. The mounting height is measured at the spinner discs front- and rear-edge each from the surface of the ground (**Fig. 3**).

2.1 Normal fertilising

The mounting heights (in cm) stated are valid for normal fertilising. For normal fertilising the swivel blades of the spinner vanes are usually in a „downward“ position (**Fig. 4**).

For fertilising in spring when the crop is grown already to a height of 10 - 40 cm, **one half of the grown height should be added to the mounting heights stated (e. g. 80/80)**. Thus at a **plant height of 30 cm = mounting height 95/95** should be set. At taller crop heights the machine should be set up according to the settings mentioned for late top dressing (para. 2.2). When crops are very dense (rape) the fertiliser spreader should be set with the mounting height stated (e. g. 80/80) **above** the crop height. Should this still be impossible due to a higher plant height, the machine should also be set up according to the settings for late top dressing (para. 2.2).

Mounting height for late top dressing: "B"

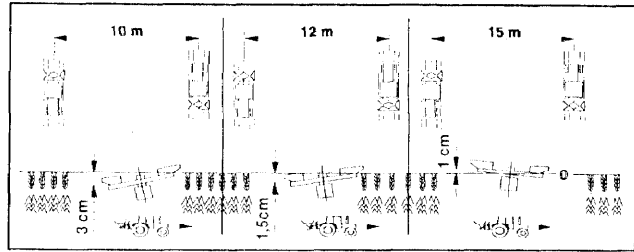


Fig. 6

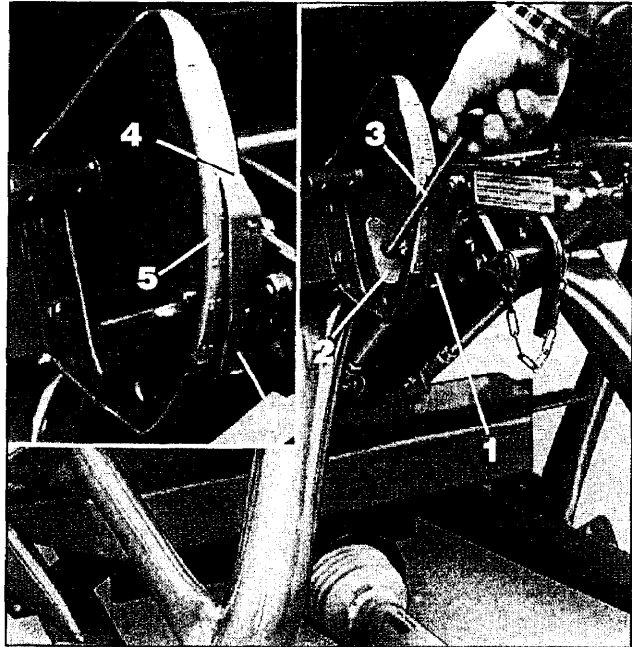


Fig. 7

2.2 Late top dressing

For late top dressing the swivel blades of the vanes should be swivelled in the „up“ position without slackening the nuts and without the use of any tools (Fig. 5). This will raise the throwing curve of the fertiliser.

Set the mounting height of the broadcaster with the aid of the tractor 3-point linkage according to fig.6. Should the lifting height of the tractor's hydraulics be insufficient, a crop lowerer (option) is necessary which bends down the ears of the grain in the area of the spreading discs.



If the universal joints of the pto-shaft is angled by more than 25°, use a wide angle pto-shaft (option).

3.0 Setting the spread rate [kg/ha]

Conduct the spread rate setting only while the shutter slides are in a closed position.

3.1 Determining the shutter slide position with the aid of the setting chart (Standard execution).

Take the shutter slide position immediately from the setting chart- under consideration of the factors: „kind of fertiliser“ , „working width“, „intended forward speed“ and „desired spread rate“.

The statement [kg/l] refers to the bulk density of the corresponding fertiliser (weight of one litre in volume of fertiliser).

The required shutter slide position is set at the stop (Fig.7/1) as follows:

- Slacken the clamping bolt (Fig. 7/2) with the aid of the lever extension rod (Fig. 7/3) .
- Move the reading-off edge of the stop plate (Fig. 7/4) to that position of the scale (Fig. 7/5) which was taken from the setting chart.
- Re-tighten clamping bolt again.

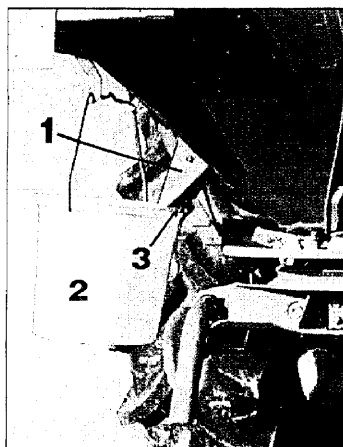


Fig. 8

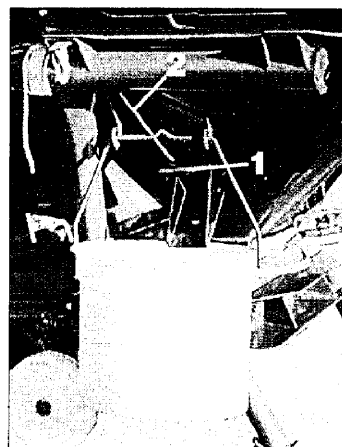


Fig. 9

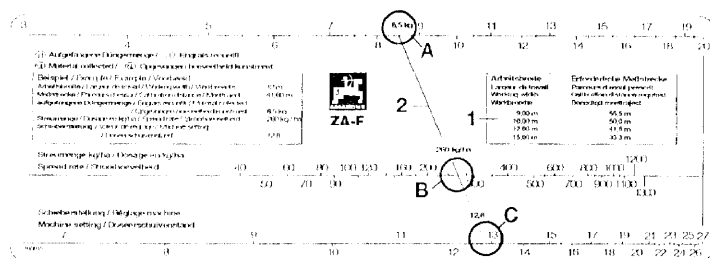


Fig. 10

Determining the shutter slide position for such **working widths** and/or **forward speeds** which are **not** mentioned in the setting chart.

Example:

Kind of fertiliser: CAN 27 % N granular BASF
Wanted working width: 9 m
Wanted spread rate: 415 kg/ha
Intended forward speed: 7 k.p.h

$$\frac{9 \text{ m} \times 415 \text{ kg/ha} \times 7 \text{ k.p.h}}{100} = 261$$

Search for the figure **261** in the table in column 10 m working width and 10 k.p.h. and read off shutter slide position '**13**'.

3.2 Determining the shutter slide position without setting chart but with the aid of the calibration device (Fig. 8/1).

Determine shutter slide position as follows:

Example:

Desired working width: 12 m
Wanted spread rate: 260 kg/ha
Intended forward speed: 8 k.p.h



When determining the shutter slide position both shutter slides remain in 'closed' position and the pto-shaft stays disengaged.

- Hang in bucket (Fig. 8/2) by its handle to the hooks provided at the machine and let the clamping device (Fig. 8/3) lock in.
- Completely open shutter slide (Fig. 9/1) of the side calibration opening by pulling the rope (Fig. 9/2) for about 5 seconds (to ensure an even flow of fertiliser). Thereafter pour the collected fertiliser back into the hopper of the broadcaster.
- From the table (Fig. 10/1) of the nomograph (Fig. 10) read off the required measuring distance (**41,6m**) for the working width (12 m). Accurately measure out the given distance and mark the beginning and the end point of the calibration distance on the field.
- Accurately drive along the measured calibration distance from the beginning to the end point under field conditions, i.e. **with the intended constant forward speed**. By pulling the rope against the stop open completely and accurately the side outlet at the beginning point of the calibration distance and shut it again at the end point.

- Weigh the collected amount of fertiliser inside the collecting bucket. When travelling along the calibration distance (**41,6 m**) at a constant forward speed (**8 k.p.h.**) the amount of fertiliser collected weighs in this example **8,5 kgs**.

The nomograph consists of :

1. One upper scale "**A**" for the collected spread rate between „3 and 20" kgs.
 2. One middle scale "**B**" for the desired spread rate between „40 and 1300" kgs/ha.
 3. One lower scale „**C**" for the shutter slide position from „7 to 27".
- For the collected fertiliser amount (**8,5 kg**) **look for the figure on the upper scale (Fig. 10/A)** and for the desired spread rate (**260 kg/ha**) find the figure on the middle scale (**Fig. 10/B**). Now connect the two points by a straight line (Fig. 10/2) [e.g. by a rule, twine etc.], so that its downward extension shows on the lower scale (**Fig. 10/C**) the required shutter slide position „**12,8**".

4.0 Boundary resp. one side spreading with the boundary spread limiter (option) (Distance from tractor centre to the fields side 1,5 to 2,0 m)

If the first tram line is placed within the first drill bout (with a 3 m seed drill the distance of the first tram line from the fields edge is 1.5 m), the boundary spread limiter is used by simultaneously closing one shutter slide (**Fig. 11**).

This way the fertiliser will only be thrown 1.5 to 2 m toward the fields edge.

5.0 Mounting height a/b [cm]

5.1 Mineral fertiliser

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Mounting height a/b [cm]

Kind of Fertiliser				Spread- rates s. page
	10 a/b	12 a/b	15 a/b	
ICI Nitram 34,5% N Prills				
ICI Graze More 32% N Prills				
ICI Sulphur Gold				
30% N + 19% SO ₃ Blend	80/86	90/96	—	18
KEMIRA Nitrapril 34,5% N	80/86	90/96	—	18
Hydro Extran 34,5% N Granular	80/83	80/85	 70/70	19
KEMIRA Double Top				
27% N + 30% SO ₃	80/84	80/87	—	20
CAN 27% N Granular				
BASF; DSM; HYDRO	80/81	80/83	80/87	21
ICI Turn Out				
NP 26-13-0 Granular	80/76	80/79	80/85	19
ICI No. 8 Easy Cut				
NPK 20-8-14 Granular	60/65	80/76	80/82	19
ICI First Cut				
NPK 12-15-20 Granular	80/76	80/79	80/85	19
KEMIRA Number Four				
NPK 15-15-20	80/85	90/96	 85/90	22
KEMIRA Number Ten				
NPK 20-5-15				
KEMIRA Swordsman				
NPK 20-8-12	80/80	80/85	90/94	22

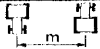


Lift swivel blades on all vanes.

Stirrer heads removed, but 'R'-pins re-inserted.



Mounting height a/b [cm]

Kind of Fertiliser				Spread- rates s. page
	10 a/b	12 a/b	15 a/b	
HYDRO Extra Grass NPK 29-5-5 Blend HYDRO Super Grass NPK 25-5-5 Blend	80/80	80/85		21
HYDRO New Maincrop NPK 14-14-21 Granular	80/83	85/90		21
ICI Kaynitro NK 25-0-16 Blend ICI Kaynitro Gold NK 20-0-14 + 8% SO ₃ Blend	80/80	80/85		24
HYDRO NK Silage NK 24-0-17 Blend	80/80	80/85		24
KEMIRA Kayenne NK 26-0-15 Blend	80/80	80/83		23
Superphosphate 18%	60/55	70/67	80/80	25
Triplephosphate 46%	80/78	80/80	80/85	20
K+S Korn-Kali ® Granular 40% K ₂ O, 6% MgO, 4% S, 3% Na	60/58	80/76	80/82	20
K+S Muriate of Potash Granular 60% K ₂ O	60/60	80/78	80/84	20
K+S Sulphate of Potash Granular 50% K ₂ O, 18% S	50/48	60/58	80/85	26
K+S Magnesia Kainit ® 11% K ₂ O, 5% MgO, 20% Na, 4% S	80/76	80/80	80/86	26
K+S ESTA ® Kieserite Granular 25% MgO, 20% S	80/80	80/80	80/82	26



Lift swivel blades on all vanes.



Stirrer heads removed, but 'R'-pins re-inserted.

5.2 Seeds and slug pellets

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Mounting height a/b [cm]

Type of seed or material										Spread-rate s. page
	5	6	7	8	8,5	9	10	12	15	
Wheat (not dressed)								80/80		27
Barley (cleaned, not dressed)								80/80		27
Oats (not dressed)								80/85		27
Rye (not dressed)								80/80		28
White lupines						80/80				28
Tick beans (dressed)						80/85				29
Yellow mustard		80/85		90/93						29
Winter vetches								80/87	90/93	30
Rape		80/85						80/85		31
Perennial Rye Grass			80/80							31
Oil radish				80/85						32
White clover						80/80				32
Lucerne	80/80									32
Autumn Turnips					80/80					33
Winter bird rape		80/80								33
Phacelia		80/80								33
Slug Pellets Mesuroi; Skipper; Spiess-Urania		80/80						80/80	80/80	34



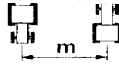
Lift swivel blades on all vanes.

Stirrer heads removed, but 'R'-pins re-inserted.

6.0 Shutter slide position for spread rates [kg/ha]

6.1 Mineral Fertilisers

ICI Nitram 34,5% N Prills	1,03 kg/l
ICI Graze More 32% N Prills	1,02 kg/l
ICI Sulphur Gold 30% N + 19% SO ₃ Blend	1,00 kg/l
KEMIRA Nitraprill 34,5% N	1,00 kg/l

Lever setting pos.															
	10					12									
	km/h					km/h					km/h				
6	8	10	12	14	6	8	10	12	14	6	8	10	12	14	
08	77	58	46	39	33	64	48	39	32	28					
09	131	98	79	66	56	109	82	66	55	47					
10	214	160	128	107	92	178	134	107	89	76					
11	318	238	191	159	136	265	199	159	132	113					
12	420	315	252	210	180	350	263	210	175	150					
13	528	396	317	264	226	440	330	264	220	189					
14	634	475	380	317	272	528	396	317	264	226					
15	739	555	444	370	317	616	462	370	308	264					
16	844	633	507	422	362	704	528	422	352	302					
17	947	711	568	474	406	790	592	474	395	338					
18	1048	786	629	524	449	873	655	524	437	374					
19	1146	859	687	573	491	955	716	573	477	409					
20	1240	930	744	620	531	1033	775	620	517	443					
21	1331	998	798	665	570	1109	832	665	554	475					
22	1418	1064	851	709	608	1182	886	709	591	506					
23	1502	1126	901	751	644	1252	939	751	626	536					
24	1583	1187	950	791	678	1319	989	791	660	565					
25	1662	1246	997	831	712	1385	1039	831	692	593					
26	1739	1304	1043	869	745	1449	1087	869	724	621					
27	1815	1361	1089	908	778	1513	1134	908	756	648					
28	1892	1419	1135	946	811	1577	1182	946	788	676					

Hydro Extran 34,5% N Granular	0,98 kg/l
ICI Turn Out NP 26-13-0 Granular	1,00 kg/l
ICI No. 8 Easy Cut NPK 20-8-14 Granular	1,00 kg/l
ICI First Cut NPK 12-15-20 Granular	1,00 kg/l

Lever setting pos.															
	10					12					15				
	km/h					km/h					km/h				
	6	8	10	12	14	6	8	10	12	14	6	8	10	12	14
08	68	51	41	34	29	57	43	34	28	24	46	34	27	23	20
09	116	87	70	58	50	97	72	58	48	41	77	58	46	39	33
10	189	142	113	94	81	157	118	94	79	67	126	94	76	63	54
11	280	210	168	140	120	234	175	140	117	100	187	140	112	93	80
12	371	278	223	185	159	309	232	185	155	132	247	185	148	124	106
13	466	350	280	233	200	389	291	233	194	167	311	233	186	155	133
14	559	420	336	280	240	466	350	280	233	200	373	280	224	186	160
15	653	490	392	326	280	544	408	326	272	233	435	326	261	213	187
16	745	559	447	373	319	621	466	373	311	266	497	373	298	248	213
17	837	627	502	418	359	697	523	418	349	299	558	418	335	279	239
18	925	694	555	463	397	771	578	463	386	331	617	463	370	308	264
19	1012	759	607	506	434	843	632	506	422	361	674	506	405	337	289
20	1095	821	657	547	469	912	684	547	456	391	730	547	438	365	313
21	1175	881	705	587	504	979	734	587	490	420	783	587	470	392	336
22	1252	939	751	626	537	1043	783	626	522	447	835	626	501	417	358
23	1326	995	796	663	568	1105	829	663	553	474	884	663	530	442	379
24	1398	1048	839	699	599	1165	874	699	582	499	932	699	559	466	399
25	1467	1100	880	734	629	1223	917	734	611	524	978	734	587	489	419
26	1535	1151	921	768	658	1279	959	768	640	548	1023	768	614	512	439
27	1603	1202	962	801	687	1335	1002	801	668	572	1068	801	641	534	458

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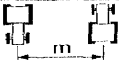
KEMIRA Double Top 27% N + 30% SO ₃	0,90 kg/l
Triplephosphate 46%	1,02 kg/l
K+S Korn-Kali® Granular	
40% K ₂ O , 6% MgO, 4% S, 3% Na	1,12 kg/l
K+S Muriate of Potash Granular 60% K ₂ O	1,14 kg/l

Lever setting pos.															
	10					12					15				
	km/h					km/h					km/h				
	6	8	10	12	14	6	8	10	12	14	6	8	10	12	14
07	37	28	22	19	16	31	23	19	15	13	25	19	15	12	11
08	61	46	37	31	26	51	38	31	26	22	41	31	24	20	17
09	104	78	62	52	45	87	65	52	43	37	69	52	42	35	30
10	169	127	102	85	73	141	106	85	71	60	113	85	68	56	48
11	251	189	151	126	108	209	157	126	105	90	168	126	101	84	72
12	333	249	200	166	143	277	208	166	139	119	222	166	133	111	95
13	418	313	251	209	179	348	261	209	174	149	279	209	167	139	119
14	501	376	301	251	215	418	313	251	209	179	334	251	201	167	143
15	585	439	351	293	251	488	366	293	244	209	390	293	234	195	167
16	668	501	401	334	286	557	418	334	278	239	445	334	267	223	191
17	750	562	450	375	321	625	469	375	312	268	500	375	300	250	214
18	829	622	498	415	355	691	518	415	346	296	553	415	332	276	237
19	907	680	544	453	389	756	567	453	378	324	604	453	363	302	259
20	981	736	589	491	421	818	613	491	409	350	654	491	393	327	280
21	1053	790	632	527	451	878	658	527	439	376	702	527	421	351	301
22	1122	842	673	561	481	935	701	561	468	401	748	561	449	374	321
23	1189	891	713	594	509	991	743	594	495	425	792	594	475	396	340
24	1253	940	752	626	537	1044	783	626	522	447	835	626	501	418	358
25	1315	986	789	658	564	1096	822	658	548	470	877	658	526	438	376
26	1376	1032	826	688	590	1147	860	688	573	491	917	688	550	459	393
27	1436	1077	862	718	616	1197	898	718	599	513	958	718	575	479	410

f-rhe-ka.xls

CAN 27% N Granular BASF; DSM; HYDRO
 HYDRO Extra Grass NPK 29-5-5 Blend
 HYDRO Super Grass NPK 25-5-5 Blend
 HYDRO New Maincrop NPK 14-14-21 Granular

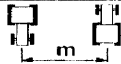
1,06 kg/l
 0,92 kg/l
 1,01 kg/l
 1,03 kg/l

Lever setting pos.															
	10					12					15				
	km/h					km/h					km/h				
	6	8	10	12	14	6	8	10	12	14	6	8	10	12	14
8	64	48	38	32	27	53	40	32	27	23	42	32	25	21	18
9	108	81	65	54	46	90	67	54	45	39	72	54	43	36	31
10	176	132	106	88	75	147	110	88	73	63	117	88	70	59	50
11	261	196	157	131	112	218	163	131	109	93	174	131	105	87	75
12	346	259	207	173	148	288	216	173	144	123	230	173	138	115	99
13	434	326	261	217	186	362	271	217	181	155	290	217	174	145	124
14	521	391	313	261	223	434	326	261	217	186	347	261	208	174	149
15	608	456	365	304	261	507	380	304	253	217	405	304	243	203	174
16	695	521	417	347	298	579	434	347	289	248	463	347	278	232	198
17	779	585	468	390	334	649	487	390	325	278	520	390	312	260	223
18	862	647	517	431	370	718	539	431	359	308	575	431	345	287	246
19	942	707	565	471	404	785	589	471	393	337	628	471	377	314	269
20	1020	765	612	510	437	850	638	510	425	364	680	510	408	340	291
21	1095	821	657	547	469	912	684	547	456	391	730	547	438	365	313
22	1166	875	700	583	500	972	729	583	486	417	778	583	467	389	333
23	1236	927	741	618	530	1030	772	618	515	441	824	618	494	412	353
24	1302	977	781	651	558	1085	814	651	543	465	868	651	521	434	372
25	1367	1025	820	683	586	1139	854	683	570	488	911	683	547	456	391
26	1430	1073	858	715	613	1192	894	715	596	511	954	715	572	477	409
27	1493	1120	896	747	640	1244	933	747	622	533	995	747	597	498	427
28	1556	1167	934	778	667	1297	973	778	648	556	1038	778	623	519	445

L-KAS1.xls

KEMIRA Number Four NPK 15-15-20
KEMIRA Number Ten NPK 20-5-15
KEMIRA Swordsman NPK 20-8-12

1,03 kg/l
1,03 kg/l
1,02 kg/l

Lever setting pos.															
	10					12					15				
	km/h					km/h					km/h				
	6	8	10	12	14	6	8	10	12	14	6	8	10	12	14
08	66	49	39	33	28	55	41	33	27	23	34	25	20	17	15
09	111	84	67	56	48	93	70	56	46	40	58	43	35	29	25
10	182	136	109	91	78	151	114	91	76	65	94	70	56	47	40
11	270	202	162	135	116	225	168	135	112	96	139	105	84	70	60
12	357	267	214	178	153	297	223	178	149	127	184	138	111	92	79
13	448	336	269	224	192	373	280	224	187	160	232	174	139	116	99
14	538	403	323	269	230	448	336	269	224	192	278	209	167	139	119
15	627	471	376	314	269	523	392	314	261	224	325	243	195	162	139
16	717	537	430	358	307	597	448	358	299	256	371	278	222	185	159
17	804	603	482	402	345	670	503	402	335	287	416	312	250	208	178
18	889	667	534	445	381	741	556	445	371	318	460	345	276	230	197
19	972	729	583	486	417	810	608	486	405	347	503	377	302	251	216
20	1052	789	631	526	451	877	658	526	438	376	544	408	327	272	233
21	1129	847	678	565	484	941	706	565	471	403	584	438	350	292	250
22	1203	903	722	602	516	1003	752	602	501	430	622	467	373	311	267
23	1275	956	765	637	546	1062	797	637	531	455	659	494	396	330	283
24	1343	1008	806	672	576	1119	840	672	560	480	695	521	417	347	298
25	1410	1058	846	705	604	1175	881	705	588	504	729	547	438	365	313
26	1476	1107	885	738	632	1230	922	738	615	527	763	572	458	382	327
27	1540	1155	924	770	660	1284	963	770	642	550	797	598	478	398	341

f-kaiks1.xls

Lever setting Pos															
	10					12					15				
	km/h					km/h					km/h				
	6	8	10	12	14	6	8	10	12	14	6	8	10	12	14
08	51	38	31	25	22	42	32	25	21	18	34	25	20	17	15
09	86	65	52	43	37	72	54	43	36	31	58	43	35	29	25
10	141	106	85	70	60	117	88	70	59	50	94	70	56	47	40
11	209	157	125	105	90	174	131	105	87	75	139	105	84	70	60
12	277	207	166	138	119	231	173	138	115	99	184	138	111	92	79
13	348	261	209	174	149	290	217	174	145	124	232	174	139	116	99
14	417	313	250	209	179	348	261	209	174	149	278	209	167	139	119
15	487	365	292	243	209	406	304	243	203	174	325	243	195	162	139
16	556	417	334	278	238	463	347	278	232	199	371	278	222	185	159
17	624	468	374	312	267	520	390	312	260	223	416	312	250	208	178
18	690	518	414	345	296	575	431	345	288	246	460	345	276	230	197
19	754	566	453	377	323	629	472	377	314	269	503	377	302	251	216
20	816	612	490	408	350	680	510	408	340	292	544	408	327	272	233
21	876	657	526	438	376	730	548	438	365	313	584	438	350	292	250
22	934	700	560	467	400	778	584	467	389	333	622	467	373	311	267
23	989	742	593	494	424	824	618	494	412	353	659	494	396	330	283
24	1042	782	625	521	447	869	651	521	434	372	695	521	417	347	298
25	1094	821	656	547	469	912	684	547	456	391	729	547	438	365	313
26	1145	859	687	572	491	954	716	572	477	409	763	572	458	382	327
27	1195	896	717	598	512	996	747	598	498	427	797	598	478	398	341

ICI Kaynitro NK 25-0-16 Blend

1,05 kg/l

ICI Kaynitro Gold NK 20-0-14 + 8% SO₃ Blend

1,05 kg/l

HYDRO NK Silage NK 24-0-17 Blend

0,96kg/l

Lever setting pos.															
	10					12					15				
	km/h					km/h					km/h				
	6	8	10	12	14	6	8	10	12	14	6	8	10	12	14
08	30	22	18	15	12	25	18	15	12	10	20	15	12	10	8
09	43	32	25	21	18	35	26	21	17	15	28	21	17	14	12
10	58	51	40	34	29	56	42	34	28	24	45	34	27	22	19
11	105	78	63	52	45	87	65	52	43	37	70	52	42	35	30
12	160	120	96	80	68	133	100	80	66	57	106	80	64	53	45
13	245	183	147	122	105	204	153	122	102	87	163	122	98	81	70
14	330	247	198	165	141	275	206	165	137	114	220	165	132	110	94
15	430	322	258	215	184	358	268	215	179	153	286	215	172	143	122
16	510	382	306	255	218	425	318	255	212	182	340	255	204	170	145
17	600	450	360	300	257	500	375	300	250	214	400	300	240	200	171
18	690	517	414	345	295	575	431	345	287	246	460	345	276	230	197
19	795	596	477	397	340	662	496	397	331	283	530	397	318	265	227
20	900	675	540	450	385	750	562	450	375	321	600	450	360	300	257
21	1010	757	606	505	432	841	631	505	420	360	673	505	404	336	288
22	1110	832	666	555	475	925	693	555	462	396	740	555	444	370	317
23	1220	915	732	610	522	1016	762	610	508	435	813	610	488	406	348
24	1315	986	789	657	563	1095	821	657	547	469	876	657	526	438	375
25	1395	1046	837	697	597	1162	871	697	581	498	930	697	558	465	398
26	1465	1098	879	732	627	1220	915	732	610	523	976	732	586	488	418
27	1530	1147	918	765	655	1275	956	765	637	546	1020	765	612	510	437

Fazılca.xls

Lever setting pos.															
	10					12					15				
	km/h					km/h					km/h				
	6	8	10	12	14	6	8	10	12	14	6	8	10	12	14
08	70	52	42	35	30	58	44	35	29	25	47	35	28	23	20
09	119	89	71	59	51	99	74	59	49	42	79	59	47	40	34
10	193	145	116	97	83	161	121	97	81	69	129	97	77	64	55
11	287	215	172	143	123	239	179	143	120	102	191	143	115	96	82
12	380	285	228	190	163	316	237	190	158	136	253	190	152	127	108
13	477	358	286	239	204	398	298	239	199	170	318	239	191	159	136
14	572	429	343	286	245	477	358	286	239	204	382	286	229	191	164
15	668	501	401	334	286	557	418	334	278	239	445	334	267	223	191
16	763	572	458	381	327	636	477	381	318	272	509	381	305	254	218
17	856	642	514	428	367	713	535	428	357	306	571	428	342	285	245
18	947	710	568	473	406	789	592	473	395	338	631	473	379	316	271
19	1035	776	621	518	444	863	647	518	431	370	690	518	414	345	296
20	1120	840	672	560	480	934	700	560	467	400	747	560	448	373	320
21	1202	902	721	601	515	1002	751	601	501	429	802	601	481	401	344
22	1281	961	769	641	549	1068	801	641	534	458	854	641	512	427	366
23	1357	1018	814	678	582	1131	848	678	565	485	905	678	543	452	388
24	1430	1073	858	715	613	1192	894	715	596	511	953	715	572	477	409
25	1501	1126	901	751	643	1251	938	751	626	536	1001	751	600	500	429
26	1571	1178	942	785	673	1309	982	785	655	561	1047	785	628	524	449
27	1640	1230	984	820	703	1367	1025	820	683	586	1093	820	656	547	469

Lpk-r1.xls

K+S Sulphate of Potash Granular 50% K ₂ O , 18% S	1,28 kg/l
K+S Magnesia Kainit ® 11%K ₂ O , 5%MgO, 20%Na, 4%S	1,24 kg/l
K+S ESTA ® Kieserite Granular 25% MgO, 20% S	1,27 kg/l

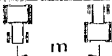
Lever setting pos.															
	10					12					15				
	km/h					km/h					km/h				
	6	8	10	12	14	6	8	10	12	14	6	8	10	12	14
08	74	56	45	37	32	62	47	37	31	27	50	37	30	25	21
09	126	95	76	63	54	105	79	63	53	45	84	63	51	42	36
10	206	155	124	103	88	172	129	103	86	74	137	103	82	69	59
11	306	229	183	153	131	255	191	153	127	109	204	153	122	102	87
12	405	303	243	202	173	337	253	202	169	144	270	202	162	135	116
13	508	381	305	254	218	424	318	254	212	182	339	254	203	169	145
14	610	458	366	305	261	508	381	305	254	218	407	305	244	203	174
15	712	534	427	356	305	593	445	356	297	254	475	356	285	237	203
16	813	610	488	406	348	677	508	406	339	290	542	406	325	271	232
17	912	684	547	456	391	760	570	456	380	326	608	456	365	304	261
18	1009	757	605	505	432	841	631	505	420	360	673	505	404	336	288
19	1103	827	662	552	473	919	689	552	460	394	735	552	441	368	315
20	1194	895	716	597	512	995	746	597	497	426	796	597	478	398	341
21	1281	961	769	641	549	1068	801	641	534	450	854	641	513	427	366
22	1365	1024	819	683	585	1138	853	683	569	488	910	683	546	455	390
23	1446	1085	868	723	620	1205	904	723	603	516	964	723	578	482	413
24	1524	1143	914	762	653	1270	953	762	635	544	1016	762	610	508	435
25	1600	1200	960	800	686	1333	1000	800	667	571	1067	800	640	533	457
26	1674	1256	1004	837	717	1395	1046	837	698	598	1116	837	670	558	478
27	1748	1311	1049	874	749	1456	1092	874	728	624	1165	874	699	583	499

Hyperp.xls

6.2 Seeds and slug pellets

Wheat (not dressed) 0,78 kg/l						Barley (cleaned, not dressed) 0,64 kg/l						Oats (not dressed) 0,48 kg/l						
Lever setting pos.																		
	12 km/h						12 km/h						12 km/h					
	6	8	10	12	14		6	8	10	12	14		6	8	10	12	14	
13	110	82	66	55	47		35	26	21	17	15		42	31	25	21	18	
14	145	109	87	72	62		53	40	32	27	23		63	47	38	32	27	
15	200	150	120	100	86		77	57	46	38	33		92	69	55	46	39	
16	230	173	138	115	99		103	77	62	52	44		112	84	67	56	48	
17	275	206	165	138	118		133	100	80	67	57		140	105	84	70	60	
18	333	250	200	167	143		162	121	97	81	69		185	139	111	93	79	
19	375	281	225	188	161		200	150	120	100	86		202	151	121	101	86	
20	430	322	258	215	184		233	175	140	117	100		238	179	143	119	102	
21	467	350	280	233	200		267	200	160	133	114		283	212	170	142	121	
22	525	394	315	263	225		312	234	187	156	134		308	231	185	154	132	
23	545	409	327	273	234		347	260	208	173	149		358	269	215	179	154	
24	600	450	360	300	257		383	287	230	192	164		378	284	227	189	162	
25	638	479	383	319	274		410	308	246	205	176		428	321	257	214	184	
26	670	503	402	335	287		438	329	263	219	188		475	356	285	238	204	
27	700	525	420	350	300		467	350	280	233	200		533	400	320	267	229	

twr20-d.xls

Rye (not dressed)						White lupines												
0,74 kg/l						0,76 kg/l												
Lever setting pos.																		
	12 km/h						9 km/h						km/h					
	6	8	10	12	14	6	8	10	12	14	6	8	10	12	14			
10						89	67	54	45	38								
11						133	100	80	66	57								
12						176	132	105	88	75								
13	75	56	45	38	32	221	165	132	110	95								
14	110	82	66	55	47	265	199	159	132	113								
15	158	119	95	79	68	309	232	185	154	132								
16	197	148	118	98	84	353	265	212	176	151								
17	238	179	143	119	102	396	297	238	198	170								
18	293	220	176	147	126	438	328	263	219	188								
19	325	244	195	163	139													
20	367	275	220	183	157													
21	407	305	244	203	174													
22	450	337	270	225	193													
23	492	369	295	246	211													
24	525	394	315	263	225													
25	558	419	335	279	239													
26	595	446	357	298	255													
27	627	470	376	313	269													

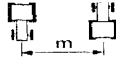
hogge d.xls

Tick beans (dressed)						Yellow mustard										
0,83 kg/l						0,77 kg/l										
Lever setting pos.																
	9					6					8					
	km/h					km/h					km/h					
	6	8	10	12	14	6	8	10	12	14	6	8	10	12	14	
						9,8	7,4	5,9	4,9	4,2						
						13,1	9,8	7,8	6,5	5,6	9,8	7,4	5,9	4,9	4,2	
						16,3	12,3	9,8	8,2	7,0	12,3	9,2	7,4	6,1	5,3	
						29,2	21,9	17,5	14,6	12,5	21,9	16,4	13,1	10,9	9,4	
	7	24	18	15	12	10	63,4	47,6	38,0	31,7	27,2	47,6	35,7	28,5	23,8	20,4
	8	40	30	24	20	17	104,9	78,7	62,9	52,4	45,0	78,7	59,0	47,2	39,3	33,7
	9	68	51	41	34	29										
	10	111	83	67	55	48										
	11	165	123	99	82	71										
	12	218	163	131	109	93										
	13	274	205	164	137	117										
	14	328	246	197	164	141										
	15	383	287	230	192	164										
16	438	328	263	219	188											

fackert-d.xls

Lever setting pos.												
	12 km/h						15 km/h					
6	8	10	12	14	14	14	6	8	10	12	14	14
7	32	24	19	16	14	14	26	19	15	13	11	11
8	53	40	32	26	23	23	42	32	25	21	18	18
9	89	67	54	45	38	38	72	54	43	36	31	31
10	146	109	88	73	63	63	117	89	70	58	50	50
11	217	162	130	108	93	93	173	133	104	87	74	74
12	286	215	172	143	123	123	229	172	138	115	98	98

New world AB

Rape											Perennial Rye Grass					
0,70 kg/l											0,51 kg/l					
Lever setting pos.																
	6 km/h					12 km/h					7 km/h					
	6	8	10	12	14	6	8	10	12	14	6	8	10	12	14	
4	3.0	2.3	1.8	1.5	1.3											
5	12.3	9.2	7.4	6.2	5.3	6.2	4.6	3.7	3.1	2.6						
6	22.7	17.0	13.6	11.3	9.7	11.3	8.5	6.8	5.7	4.9						
7	47.3	35.5	28.4	23.7	20.3	23.7	17.8	14.2	11.8	10.1						
8	68.7	51.5	41.2	34.3	29.4	34.3	25.8	20.6	17.2	14.7	22.6	17.0	13.6	11.3	9.7	
9	101.0	75.7	60.6	50.5	43.3	50.5	37.9	30.3	25.2	21.6	38.4	28.8	23.0	19.2	16.4	
10											62.6	47.0	37.6	31.3	26.8	
11											92.9	69.7	55.7	46.5	39.8	
12											122.9	92.2	73.7	61.5	52.7	
13											154.5	115.9	92.7	77.2	66.2	
14																

paps-d.xls

Autumn Turnips 0,74 kg/l						Winter bird rape 0,68 kg/l						Phacelia 0,59 kg/l						
Lever setting pos.																		
	8,5					6					6							
	km/h					km/h					km/h							
	6	8	10	12	14	6	8	10	12	14	6	8	10	12	14			
1	4.0	3.0	2.4	2.0	1.7													
2	8.0	6.0	4.8	4.0	3.4	8.2	6.1	4.9	4.1	3.5								
3	14.0	11.0	8.0	7.0	6.0	12.3	9.2	7.4	6.1	5.3	9.8	7.4	5.9	4.9	4.2			
4	18.0	13.0	10.0	9.0	8.0	16.4	12.3	9.8	8.2	7.0	13.1	9.8	7.9	6.6	5.6			
5	29.0	22.0	18.0	15.0	13.0	20.5	15.3	12.3	10.2	8.8	16.4	12.3	9.8	8.2	7.0			
6	47.0	35.0	28.0	23.0	20.0	24.6	18.4	14.7	12.3	10.5	19.7	14.8	11.8	9.8	8.4			
7	65.0	49.0	39.0	32.0	28.0	57.7	43.2	34.6	28.8	24.7	46.2	34.7	27.7	23.1	19.8			
8	97.0	72.0	58.0	48.0	42.0	95.4	71.5	57.2	47.7	40.9	76.4	57.3	45.9	38.2	32.8			

ther-r-d.xls

Lever setting pos.	6						10						12					
	km/h						km/h						km/h					
	6	8	10	12	14		6	8	10	12	14	6	8	10	12	14		
5,5	4,2	3,1	2,5	2,1	1,8		4,2	3,2	2,5	2,1	1,8	3,5	2,6	2,1	1,8	1,5		
6,0	7,0	5,3	4,2	3,5	3,0		6,4	4,8	3,8	3,2	2,7	5,3	4,0	3,2	2,7	2,3		
6,5	10,7	8,0	6,4	5,3	4,6		9,0	6,7	5,4	4,5	3,9	7,5	5,6	4,5	3,7	3,2		
7,0	15,0	11,2	9,0	7,5	6,4													

Imesur 4 MS



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