tag	accuracy	f1 score	accuracy for unknown words	accuracy for known words	number of unknown words	number of known words
A (إسم)	97.69 %	96.63 %	92.31 %	98.03 %	13	203
B (رقم)	100.0 %	100.0 %	100.0 %	100.0 %	2	206
C (إسم معرف)	83.89 %	50.87 %	57.14 %	86.67 %	14	135
D (إضافة)	74.83 %	57.31 %	21.74 %	84.38 %	23	128
E (منعوت)	97.96 %	97.58 %	60.0 %	99.3 %	5	142
F (نعت)	84.18 %	83.26 %	60.0 %	85.81 %	10	148
G (حرف جر)	100.0 %	100.0 %	NULL	100.0 %	0	51
H (إسم مجرور)	75.68 %	73.76 %	45.45 %	88.46 %	11	26
I (وحدة قيس)	100.0 %	100.0 %	100.0 %	100.0 %	2	111
J (واو العطف)	100.0 %	100.0 %	NULL	100.0 %	0	37
K (فعل مبني للمجهول)	83.33 %	30.7 %	83.33 %	83.33 %	6	36
L (المفعول المطلق)	0.0 %	0.0 %	NULL	0.0 %	0	1
M (أداةُ عَطْفٌ غير واو العطف)	85.71 %	46.15 %	NULL	85.71 %	0	7
.	99.49 %	33.25 %	NULL	99.49 %	0	784

Table 1: Performances for each tag using our ingredient extractor for fold 6 with $\lambda = 4$ when accuracy is 100% on first layer

tag	accuracy	f1 score	accuracy for unknown words	accuracy for known words	number of unknown words	unknown words percentage
0	95.78 %	67.91 %	61.11 %	97.38 %	78	9.67 %
1	94.34 %	66.51 %	68.85 %	95.87 %	107	13.26 %
2	94.98 %	67.32 %	67.96 %	96.44 %	88	10.9 %
3	95.83 %	67.71 %	62.65 %	97.25 %	75	9.29 %
4	94.88 %	67.76 %	71.84 %	96.05 %	92	11.4 %
5	95.9 %	69.57 %	70.79 %	97.0 %	83	10.29 %
6	94.43 %	65.92 %	55.81 %	96.08 %	80	9.91 %
7	-	-	-	-	-	-
8	-	-	-	-	-	-
9	-	-	-	-	-	-
Avg	-	-	-	-	-	-

Table 2: Performances in predicting ingredients states for fold 6 with $\lambda = 4$ when accuracy is 100% on first layer