tag	accuracy	f1 score	accuracy for unknown words	accuracy for known words	number of unknown words	number of known words
A (إسم)	97.24 %	96.35 %	75.0 %	98.54 %	12	205
B (رقم)	100.0 %	100.0 %	100.0 %	100.0 %	3	190
C (إسم معرف)	90.53 %	45.67 %	56.25 %	94.12 %	16	153
D (إضافة)	82.25 %	80.08 %	35.29 %	87.5 %	17	152
E (منعوت)	96.03 %	95.68 %	100.0 %	95.95 %	3	148
F (نعت)	89.63 %	88.94 %	45.45 %	92.81 %	11	153
G (حرف جر)	100.0 %	100.0 %	100.0 %	100.0 %	1	59
H (إسم مجرور)	78.72 %	50.51 %	63.64 %	83.33 %	11	36
I (وحدة قيس)	100.0 %	100.0 %	100.0 %	100.0 %	1	79
J (واو العطف)	97.56 %	49.38 %	NULL	97.56 %	0	41
K (فعل مبني للمجهول)	86.05 %	46.25 %	77.78 %	88.24 %	9	34
L (المفعول المطلق)	NULL	NULL	NULL	NULL	0	0
M (أداةُ عَطْفٌ غير واو العطف)	100.0 %	100.0 %	NULL	100.0 %	0	12
.	99.87 %	49.97 %	NULL	99.87 %	0	780

Table 1: Performances for each tag using our ingredient extractor for fold 8 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	94.04 %	65.54 %	51.02 %	96.17 %	90	11.15 %
8	95.63 %	68.82 %	60.71 %	97.06 %	77	9.54 %
9	-	-	-	-	-	-
Avg	-	-	-	-	-	-

Table 2: Performances in predicting ingredients states for fold 8 with $\lambda = 4$ when accuracy is 100% on first layer