tag	accuracy	f1 score	accuracy for unknown words	accuracy for known words	number of unknown words	number of known words
A (إسم)	95.05 %	92.85 %	72.73 %	96.21 %	11	211
B (رقم)	100.0 %	100.0 %	100.0 %	100.0 %	6	205
C (إسم معرف)	94.9 %	64.39 %	93.33 %	95.07 %	15	142
D (إضافة)	87.26 %	63.47 %	50.0 %	90.91 %	14	143
E (منعوت)	95.89 %	94.91 %	40.0 %	97.87 %	5	141
F (نعت)	89.82 %	88.73 %	88.89 %	89.93 %	18	149
G (حرف جر)	97.87 %	49.46 %	NULL	97.87 %	0	47
H (إسم مجرور)	58.33 %	40.01 %	35.71 %	72.73 %	14	22
I (وحدة قيس)	100.0 %	100.0 %	100.0 %	100.0 %	3	114
J (واو العطف)	97.67 %	49.41 %	NULL	97.67 %	0	43
K (فعل مبني للمجهول)	87.5 %	31.11 %	66.67 %	90.48 %	3	21
L (المفعول المطلق)	0.0 %	0.0 %	NULL	0.0 %	0	1
M (أداةُ عَطْفٌ غير واو العطف)	100.0 %	100.0 %	NULL	100.0 %	0	10
.	99.49 %	33.25 %	NULL	99.49 %	0	784

Table 1: Performances for each tag using our ingredient extractor for fold 5 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	-	-	-	-	-	-
7	-	-	-	-	-	-
8	-	-	-	-	-	-
9	-	-	-	-	-	-
Avg	-	-	-	-	-	-

Table 2: Performances in predicting ingredients states for fold 5 with $\lambda = 4$ when accuracy is 100% on first layer