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

			accuracy for	accuracy for	number of	unknown
tag	accuracy	f1 score	unknown	known	unknown	words
			words	words	words	percentage
0	95.78 %	67.91 %	61.11 %	97.38 %	78	9.67 %
1	94.38~%	66.54~%	68.85 %	95.92~%	107	13.26 %
2	95.08~%	67.39 %	67.96 %	96.54 %	88	10.9 %
3	95.83~%	67.71 %	62.65 %	97.25 %	75	9.29 %
4	94.83~%	67.72 %	71.84 %	96.0 %	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