









































Table 14. X-ray diffraction data of starch isolated from cultivar *Bread Wheat Misr 1*

No.	Pos. [ $^{\circ}$ 2Th.]	d-spacing [ $\text{\AA}$ ]	Height [cts]	Height [cps]	Rel. Int. [%]
1	6.9616	12.68738	3.63	7.25	7.9
2	15.1731	5.8394	23.88	47.75	52.02
3	17.0668	5.19549	35.47	70.94	77.28
4	18.1684	4.87884	22.28	44.55	48.54
5	19.8401	4.47135	2.59	5.18	5.65
6	22.2549	3.99135	18.85	37.7	41.07
7	22.9472	3.87568	45.9	91.79	100
8	23.3694	3.80347	38.32	76.63	83.48
9	23.7409	3.74478	25.8	51.61	56.22
10	26.3414	3.38069	1.98	3.95	4.3
11	30.6015	2.91906	1.31	2.62	2.85
12	33.3618	2.68358	2.45	4.89	5.33
13	37.3642	2.4048	4.93	9.86	10.74
14	45.5809	1.99022	2.66	5.32	5.8
15	47.3014	1.92018	4.7	9.41	10.25

## 4. Conclusion

Studying physicochemical properties of starch isolated from two common wheat cultivars (*Durum Beni Suef 1* and *Bread Wheat Misr 1*), while revealed close results in some studied properties, it showed distant results in other properties especially in amylose-amylopectin profile, water binding capacity (WBC), swelling power and solubility at different temperatures. The

current study proves that cultivar variation affects some important physicochemical properties that could affect appearance, structure and quality of foods. Also, the isolated starches could find useful applications as carriers of versatile potentially biologically active compound in versatile feed additives and pharmaceutical applications.

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